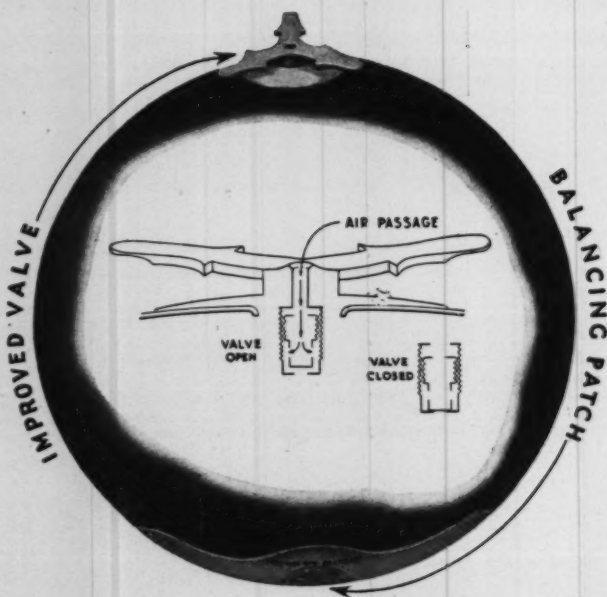


This ball believes in permanent inflation!



SPALDING IMPROVED BALANCED VALVE BLADDER

Will not leak

Will not puncture

New quick-detachable feature

Absolutely fool-proof

THE Spalding Official DV Basketball makes inflation permanent and safe.

Permanent because its new valve is as leak-proof as closed practice. *Safe* because its new method of inflation banishes forever the hazard of puncturing the bladder.

Then, too, the DV has the patented balancing patch that offsets the weight of the valve and makes this the most perfectly balanced ball ever played.

It is double-lined and double-laced . . . free from dead spots . . . perfect in rebound. Its cover is top-quality leather, tailored to official specifications with the benefit of all Spalding's famous "savvy." And it's double-checked by the most rigid factory inspections.

That's why the DV never loses its shape—or its spryness—throughout its long, long life. At a lower price, the Spalding D2V Regulation Ball is especially suited for high school play. It, too, is equipped with the new Improved Valve Balanced Bladder.

By all means see these two great balls at your nearest Spalding dealer or write for the new Spalding College and School Catalog containing full information on Spalding's complete line of basketball equipment.



Inflating tool for inflating and deflating Spalding valve bladders.

A.G. Spalding & Bros.

BASKETBALL EQUIPMENT

New Discoveries about "Mid-Game Fatigue"

and What Happens When We "Let Down" After Exertion

Ancient habit of players sucking lemons between halves — and more modern habit of "flooding" athletes with orange juice — found to have sound health basis.

TRAINING DIETS no longer are a haphazard attempt to increase or reduce weight. With the growing knowledge of specific nutritional factors, the successful athletic coach can augment endurance among his charges through diet as well as through training.

By virtue of his training, the athlete has been taught to build up and use those muscles required for his particular task. The "let-down" after exertion, however, is still a problem. The careful coach sees to it that his men are protected against too rapid cooling off with its consequent slowing up of the circulation. That's one of the reasons for the "rub-down."

Why the Rub-Down?

The rub-down helps to prevent sudden contraction of the capillaries. This microscopic network of 100,000 miles of minute blood vessels transports oxygen-carrying blood supplies to the tissues and carries away waste products. Unduly contracted capillaries do not permit the blood stream to carry away the waste products of exercise, the "fatigue toxins," to the organs designed by nature to neutralize them.

Orange and lemon juice, because of their rich content in vitamin C, have been found to have a beneficial effect on the tone of the capillaries. Poor capillary tone puts a burden on the athlete, withholding from the tissues oxygen normally supplied by the blood, and imprisoning the waste products of fatigue.

How Oranges Combat Fatigue

Yet, long before the intimate connection between fatigue and impaired capillary tone was understood, coaches and trainers had noted the value of oranges and lemons in providing a quick pick-up for their athletes. The



Group of athletes at Mooseheart, Illinois, where recent 3½-year study revealed new dietetic benefits of fresh orange and lemon juice.

desire to suck a lemon or an orange was regarded as "natural," in athletes. Now science recognizes that these wholesome, energy-laden fruit juices actually help the athlete to accomplish his physical desire to counteract fatigue by replenishing the store of a stamina-providing "something" called "vitamin C." Many other important scientific studies are in progress concerning the possible relationship of citrus fruit juices and their vitamins in counteracting "fatigue states" in various disorders.

Supply Quick Energy

No longer are the orange and lemon regarded as merely providing thirst quenching liquid without the upset dangers of cold water. No longer are these fruits looked upon merely as providing a source of quick recuperation because of their readily assimilated fruit sugars, invaluable as they are for energy. For a large orange supplies 100 calories in addition to its minerals and vitamins.

Successful coaches and athletic directors know the value of large amounts of citrus fruit in their training diets. Oranges, particularly, constitute the best food source of all four of the protective elements — Vitamins A, B, C and calcium.

New Benefits Revealed

Other research shows the value of

these vital protective factors in the diet of adolescents. When a full-sized glass of fresh orange juice containing the juice of half a lemon was served twice daily to 341 students to supplement a well-balanced diet, gum troubles decreased 83% and tooth decay 57% during a one-year period. Their average rate of growth was better also.

FREE—"Training Diets"

Because of the wide interest among coaching staffs in proper diet, we have reprinted an interesting article on "Training Diets." This article is especially valuable for its ten actual daily menus, which have the approval of many nationally famous coaches, having been used successfully by them and their teams. Send coupon for free supply.

"TRAINING DIETS" SENT FREE..MAIL COUPON

Dietetic Research Department,
California Fruit Growers Exchange
Div. 3310, Box 530, Station C,
Los Angeles, California.



Send FREE, a supply of article on
"Training Diets" with ten actual menus.

Name _____

Institution _____

Street _____

City _____ State _____

Copr., 1934, California Fruit Growers Exchange

This "I'm-for-Postum" Movement is getting to be a parade!

"The training table diet bars beverages that can cause indigestion, frayed nerves or sleeplessness. Postum cannot have any harmful effects because it contains no drug stimulant of any kind. Postum is a warm, wholesome drink I can heartily recommend."

"Correct training habits must be formed early by the youth who aspires to become an athlete. Use of stimulants retards physical developments. Postum makes a non-stimulating drink, which may be used safely by the athlete in or out of training."

"I consider Postum a helpful beverage for all athletes."

"A good training rule for anyone who wants to keep physically fit is 'No Coffee!' Yet many people feel the need of a hot meal-time drink. To these I recommend Postum, a warm, delicious drink that contains no caffeine, no artificial stimulant."



GLENN S. WARNER
Football Coach, Temple University



TUCKER P. SMITH
Trainer, Ohio State University



EARLE NEALE
*1933 Football Coach,
West Virginia University*



JAKE WEBER
Trainer, Fordham University

FREE! As many trial packages of Postum as you need for your team and candidates. Also as many copies as you need of "Pop" Warner's training booklet, "Iron Men and How to Build Them." Just fill in and mail the coupon. A product of General Foods.

GENERAL FOODS, Battle Creek, Mich. S. C. 10-34

Please send me.....sample tins of Postum. Also.....copies of "Pop" Warner's free training booklet, "Iron Men and How to Build Them."

Name.....

Street.....

City.....

State.....

Fill in completely—print name and address

This offer expires July 1, 1935

PLEASE POST THIS ON
YOUR BULLETIN BOARD

Here's Energy!



C. E. "TINY" THORNHILL
Head Football Coach
Leland Stanford University

"Eat to keep well!"

says

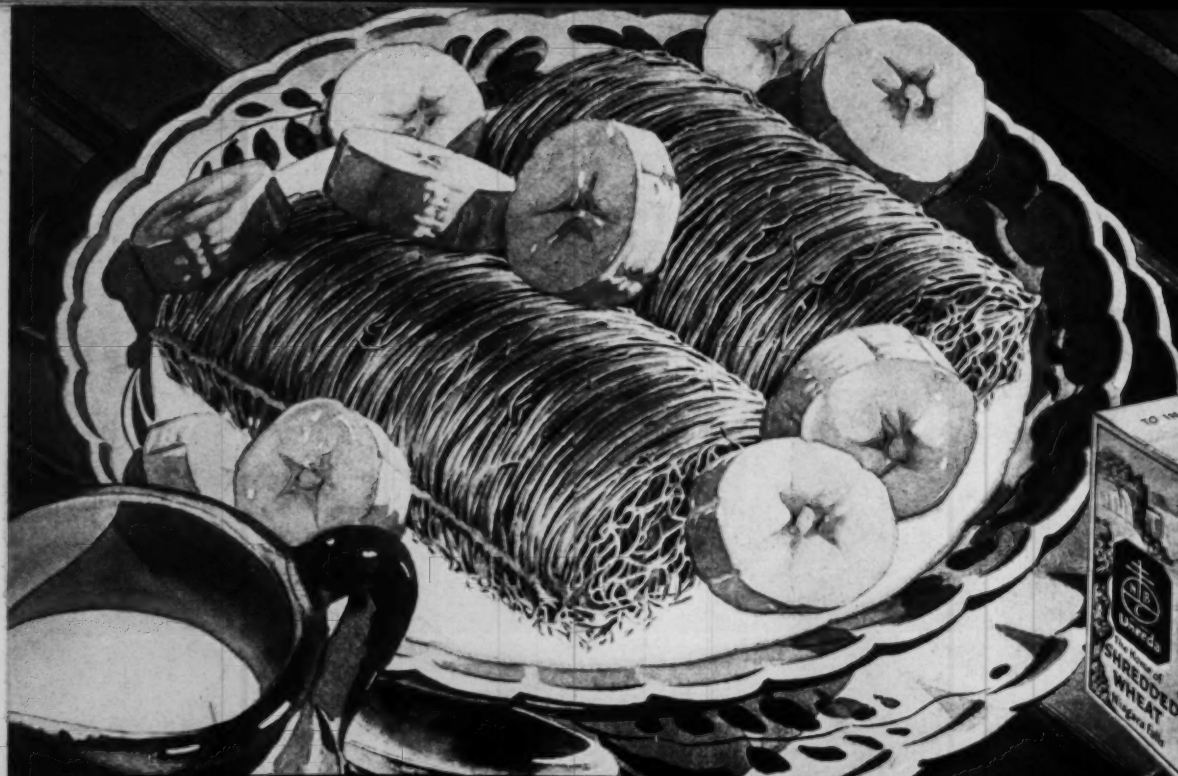
TINY THORNHILL

- 1 Eat your meals at regular hours.
- 2 Relax after eating.
- 3 Avoid heavy food before strenuous exercise.
- 4 For energy, eat whole-grain cereals, butter, starches and sugar.
- 5 To build resistance, eat plenty of fresh fruits and vegetables.
- 6 For strength, eat meat at least once a day.
- 7 Drink plenty of water and at least a pint of milk every day.
- 8 Don't eat too many sweets.
- 9 Cultivate regular habits of elimination.
- 10 Before an examination, eat lightly to keep mentally awake.

No. 7 of a series of posters
issued in the interest of
good health by

SHREDDED WHEAT





Please be sure to get the package with the picture of Niagara Falls and the N. B. C. Uneeda Seal.

NATURAL

Much of the vital speed and endurance that puts the ball "over the line" comes from what your athletes eat! The proper food means extra speed, keener eye, greater staying power.

There's energy a plenty in Shredded Wheat! Nature made it that way and you eat it just as nature made it. Shredded Wheat is 100% whole wheat with nothing added, nothing taken away. It furnishes the vital elements nature stores in sun-ripened grain—carbohydrates to supply fuel for active bodies, proteins to repair tissue that exercise burns up, minerals and vitamins for strength and endurance. And bran—nature's own body regulator, in nature's own proportions.

Crisp, brown delicious Shredded Wheat is popular primarily because it's so full of flavor! Once your boys start eating it they'll want it all the time. Get your athletes in the habit of eating Shredded Wheat with fresh fruit and milk every day and your diet worries are over for good!



SHREDDED WHEAT



NATIONAL BISCUIT COMPANY
"Uneeda Bakers"

ON THE OTHER SIDE OF THIS PAGE IS A POSTER FOR YOUR BULLETIN BOARD—No. 7 OF A SERIES. IF YOU'D LIKE EXTRA COPIES FREE FOR GYM AND ASSEMBLY HALL, SEND A POSTCARD TO NATIONAL BISCUIT COMPANY, EDUCATIONAL DEPT., 449 WEST 14th ST., NEW YORK CITY.

SCHOLASTIC COACH

Reg. U.S. Pat. Off.

IN THIS ISSUE

HERE BELOW	5
CROSS-COUNTRY	7
By Alfred W. Hubbard	
RUNNING BACK PUNTS	10
By William L. Foley	
SCHOLARSHIP AMONG HIGH SCHOOL ATHLETES	12
By Clarence Hines	
A NEW FOOTBALL FILM	13
COMMENT ON THE BASKETBALL RULES	14
By H. V. Porter	
FROM COACHING SCHOOL NOTEBOOKS	16
By H. C. Carlson and Others	
NEW BOOKS ON THE SPORTSHELF	18
GENERALSHIP	20
By Wallace Wade	
NATIONAL HIGH SCHOOL FRONT	25
By C. W. Whitten	
PHYSIOLOGY OF ATHLETICS	26
By Peter V. Karpovich	
FOR YOUR BULLETIN BOARD	37
GENERAL OFFENSIVE PLAY OF THE LINE	38
By Harold C. Prudhom	
SWIMMING RECORDS APPROVED	39

VOL 4 No. 2

JACK LIPPERT, Editor

Scholastic Coach is issued monthly nine times during the academic year (September through May) by Scholastic Corporation, M. R. Robinson, president. Publishers of *Scholastic*, national high school classroom weekly.

Address all editorial and advertising communications to Scholastic Coach, 155 East 44th Street, New York, N. Y.

G. Herbert McCracken, publisher; S. Z. Oppenheim, advertising manager. Western advertising manager, R. E. Hutchison, 35 East Wacker Drive, Chicago, Ill.

Subscriptions for the United States, \$1.50 a season (September through May). In Canada, \$2. All correspondence concerning subscriptions and circulation should be addressed to Circulation Department, Chamber of Commerce Bldg., Pittsburgh, Penna.

The entire contents of Scholastic Coach are protected by copyright.

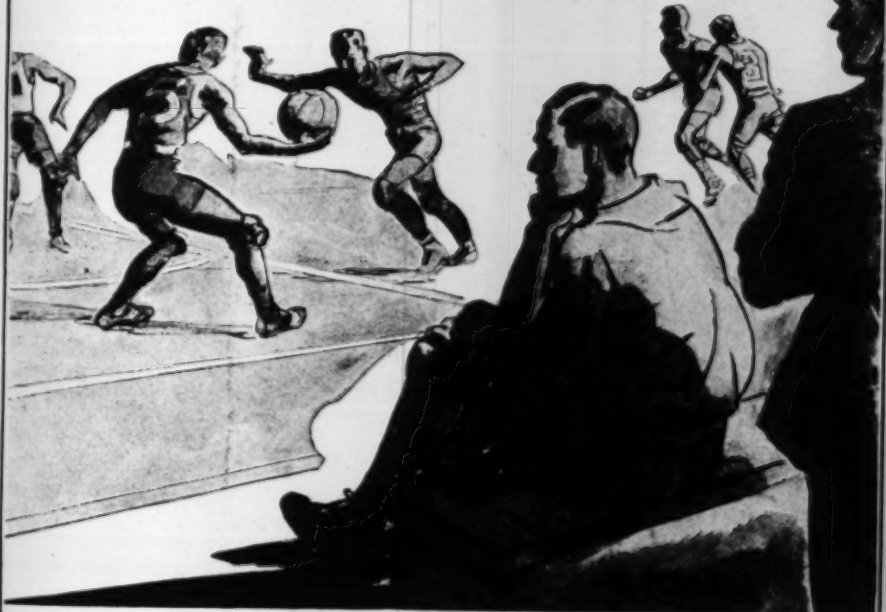
EDITORIAL ADVISORY BOARD—C. W. WHITTEN, Secretary-treasurer, National Federation of State High School Athletic Associations; ETHEL PERRIN, Vice-chairman of the Executive Committee, Women's Division, National Amateur Athletic Federation; WILLIAM BURDICK, M.D., Director, Playground Athletic League, Baltimore; WILBUR DALZELL, Director of Athletics, Dubuque, Iowa, Senior High School; DANIEL CHASE, Sportsman's Brotherhood; CHARLES S. DAVIS, Superintendent of Public Schools, Steelton, Penna.; L. L. FORSYTHE, Principal, Ann Arbor, Mich., High School; ROBERT H. HAGER, Supervisor of Physical Education, Tacoma, Wash., Public Schools; JAMES E. MANSFIELD, Athletic Director, Haverhill, Mass., High School; JAMES EDWARD ROGERS, Secretary, National Physical Education Service of the National Recreation Association, and of the Department of School Health and Physical Education of the National Education Association; LEWIS W. SMITH, Superintendent, Berkeley, Calif., Public Schools; WALTER B. SPENCER, President, Connecticut Interscholastic Athletic Conference; E. R. STEVENS, President, National Federation of State High School Athletic Associations; R. W. TRUSCOTT, Commissioner, Colorado High School Athletic Conference; W. H. YARBROUGH, Principal, Peabody Demonstration School, Nashville, Tenn.

SPORTSMANSHIP BROTHERHOOD, Inc., an organization fostering sportsmanship in athletics throughout the world, uses Scholastic Coach as its official publication. Sportsman's Brotherhood national headquarters, Room 369, McAlpin Hotel, New York, N. Y., Daniel Chase, Executive Secretary.

Scholastic Coach is a member of the Controlled Circulation Audit, a bureau for examining and auditing circulation figures for the protection of advertisers. CCA statements of Scholastic Coach circulation supplied on request. Through this service, Scholastic Coach advertisers receive incontrovertible evidence of the circulation they are paying for.



YOUR STAR PLAYER



is no good sitting on the bench

Your players, equipped with Hood Athletic Shoes with Posture Foundation, can easily maintain their speed throughout the game and season. Posture Foundation furnishes complete protection for your player's feet. It is a patented feature which provides "Insurance against tired legs, fallen arches, and flat feet." It speeds up his play and pre-

vents that "late game" leg fatigue.

Then, too, the foot stays in one position in Hood Basketball Shoe better than in ordinary shoes, thus reducing the opportunity for chafing and blistering. The extra-sure floor grip of the outsoles (either molded or buffed crepe), not only makes fast footwork an easy thing, but assures absolute safety.

Features of Hood Basketball Shoe

1. *Posture Foundation*—insurance against leg fatigue.
2. *Special Uppers*—leather or canvas—designed to prevent chafing—re-inforced against stretching—give a full season's wear.
3. *Telescopic Eyelets*—securely anchored—will not chafe laces.
4. *Sponge Cushion Heels*—prevent heel bruises.
5. *Outsoles*—Molded or Buffed Crepe—provide perfect floor traction.



POSTURE FOUNDATION

This patented feature consists of (1) a hard, rigid piece of material directly under the large anklebone, which gives proper support to the foot and guards against collapse of bone structure; and (2) a piece of resilient sponge rubber that prevents pressure under the sensitive area of the feet.



HOOD RUBBER COMPANY, Inc., WATERTOWN, MASS.—Athletic Footwear Dept.
Please send me ... copies of the 1933-34 Basketball Hints for my squad.

NAME.....SCHOOL.....CITY.....

The name of our Sporting Goods Dealer is:

NAME.....ADDRESS.....



FOR YOUR GYM FLOOR'S HEAVY SCHEDULE



THE FINISH THAT CAN "TAKE IT"

CONSIDER the punishment your gym floor receives—the rubber burns of basketball shoes—the grinding and scraping by dancing feet—the scratching and marring by bucks, horses, parallel bars—the scuffing and scarring by bat and ball—the wear and friction by assembly chairs. Truly, the gym floor finish that can stand up through this heavy schedule and come out unharmed can "take it." Yet, that is exactly what Seal-O-San does.

Seal-O-San is the one gym floor finish that meets *all* requirements of the athletic director. It makes the floor 100% non-slippery and thus prevents slips and falls. It seals the floor against dirt and moisture and thus eliminates costly scrubbing. Its resilient surface makes it ideal for gymnasium purposes, and its

hard finish successfully resists the punishing action of rubber soles, games, dancing, assemblies or traffic.

That is why you find Seal-O-San in nearly 3000 of the country's prominent schools. For athletic directors have found it the correct solution to the gymnasium floor problem. Moreover, it is easy and economical to apply—*no skilled labor being required*—also easy and economical to maintain.

Find out what the beautiful, lasting Seal-O-San finish can do to your gym floor. You will discover that no other finish you have tried possesses to such marked degree Seal-O-San's qualities of durability, elasticity, beauty, safety, and economy of upkeep.

Why not write today for an estimate?



The HUNTINGTON

HUNTINGTON

TORONTO, ONT. 72-78 Duchess St.



LABORATORIES Inc.

INDIANA

999 S. Logan St., DENVER, COLO.

SEAL-O-SAN

THE IDEAL WEAR-RESISTING FINISH FOR GYMNASIUM FLOORS



HERE BELOW

Balance for the athletic diet



HOW typical of the average high school is Pendleton (Oregon) High School we do not know. Some statistics advanced by Mr. Clarence Hines, Pendleton director of athletics, in his article in this issue on a plan for promoting scholarship among athletes, show that the Pendleton athletes are "right up in there" when it comes to batting out honors in other phases of school life besides athletics. Mr. Hines' article is, of course, not intended to show how bright and diversified in their interests the Pendleton players are, but what little evidence he has produced in this direction is not out of place.

It is usually pleasing to a coach to see that the boys who are representing the school on the field of play are doing well in their school work and concomitant life. No coach worth his salt is indifferent to a condition which finds an inordinate number of his players just squeezing through in their school work or otherwise lacking interest in other values the school has to offer. No coach of intelligence befitting his responsibility is proud of a boy whose high school horizon is bounded on the north and south by the goal posts and on the east and west by the grandstands.

Athletes, pure & simple

Coaches are sometimes blamed for circumscribing with athletics the school life of a boy who otherwise might go for a better mixture of values. In schools where this one-sided development of athletes is characteristic it is more than likely that the coach is not alone to blame. The head of the school, the faculty, the downtown board of trade, and the "downtown coaches association" are probably all in on it. In fact, the whole atmosphere would seem to require fumigating, and it sometimes gets it when a new superintendent or principal of winning per-

sonality and conviction comes in and cleans up.

It is possible that a school strong in athletics might not realize to what extent the athletes are living the narrow life. And it is just as possible that a school strong on memorization tests for acquiring an "appreciation" of poetry might not realize to what extent it is neglecting the physical welfare of its entire student body. But for the occasion we will stick to our topic—the athletes.

"That which is lost"

Because an athlete is on the principal's books as being eligible for the team, school and public opinion are sometimes inclined to regard him as having attained the proper all-around development for his age and an intellect and imagination as well exercised as his body. It does not always follow this way. Some athletes may be eligible only because they have to be that way in order to play, and beyond this necessity they have no interest whatsoever in the school's non-athletic pursuits. With such a barren, falsely-motivated interest in school work and life, the learning they acquire is not likely to amount to much. The usual answer to this is that it is better than nothing. "This boy would do no studying whatsoever if it were not for his desire to be eligible for the team." Or: "This boy would not even be in school were it not for athletics." These justifications are bonafide only when the athlete so motivated becomes genuinely interested in the other thing for its own sake. The properly organized and competently staffed school has the other things to interest nine out of ten athletes. But even these first class schools have the "one out of ten," who may or may not be an athlete. Only the school psychiatrist who understands the particular case is in a position to direct what course the school

shall follow in an effort to improve the social nature, the personality and the mind of this one. "What man of you, having an hundred sheep, if he lose one of them, doth not leave the ninety and nine in the wilderness, and go after that which is lost, until he find it?"

A school interested in a self-examination of its athletic character might conduct a study of the customs, habits and interests of the members of all the representative athletic squads engaging in interscholastic competition. To the multitudinous degree hunters who seem to be at a loss for something to write papers about we suggest a study of this kind, state-wide; and hereby hasten to put in our bid for the publication rights.

Inventory

Some of the questions we should like to have answered in respect to the squad members of each representative team and their school activities over a period of one year or more, are:

How many members of the squad are in the various honor societies? How many participate in the productions of the school dramatic club? How many play in the band? In the orchestra? How many not in the band or orchestra play musical instruments? How many take part in formal debates? How many are on the staff of the school paper or write for it or the downtown paper? How many work to earn money outside school, and what is the nature of the work? How many are members of the student government? How many like to paint, draw, or design, and really *do* it? How many have other worth-while interests and what are they? How many do nothing except pass their school work and take part in athletics?

If you have other questions for the list let us have them.

At Your Service



This latest Wilson Basketball swatch book and buying guide. It will give you a comprehensive idea of what is the newest in basketball equipment and what materials are available within definite price ranges for uniforms.

One of the most helpful pieces of coach information material gotten out—so we are told. The demand for these guides always exceeds our supply. You should receive one through the mail the very first of October. If for any reason you do not—let us know at once. We will see to it that you do.

The Wilson line of uniforms represents outstanding styles and values in the field—Wilson inflated goods has long set the standard for leadership. Be sure you get this buying guide.

WILSON-WESTERN SPORTING GOODS COMPANY
CHICAGO • NEW YORK • AND OTHER LEADING CITIES



CROSS-COUNTRY

By Alfred W. Hubbard

Mr. Hubbard, assistant coach of track and cross-country at Oberlin College last year, is now an instructor and coach at St. Johnsbury Academy, Vermont.

It is surprising that high schools neglect one of the most pleasant and beneficial forms of exercise and recreation on the sports calendar, namely cross-country running. Here is a simple, healthful, endurance-building, recreational sport, held outdoors with a constant change of scenery for the participants, yet it does not receive the attention and promotion from high school athletic directors that it deserves. The complaint that the already overworked athletic director and coach does not have time to give to it is, of course, justified where the facts bear witness to such a condition. But even busy directors and coaches sufficiently interested in cross-country are likely to find a place for it in their program.

Cross-country is a sport that can readily be adapted to a program with whatever degree of emphasis is desired. A cross-country course may be laid out anywhere, and boys' physical education classes may be trained on it. It need not be competitive. The class can be taught some of the fine points of form and efficiency in running. The boys can then compete against their own time over the course, or over only part of it. Competition among individuals, classes and schools can be introduced as the circumstances warrant.

Cross-country is a great endurance builder. One of the chief problems of the scholastic coach of any sport is the development of endurance. Comparatively few high school boys have the endurance to—for example—drive through the last twenty yards of a 100-yard dash, and in the 220 and

440 their lack of endurance to finish is even more apparent. The explanation is that they have not been trained for endurance. Their form and tactics may approach perfection, but in endurance they are far from being even adequate.

Perhaps one reason for the neglect of cross-country in high schools is the belief that schoolboys, because they lack endurance, should refrain from extended exercise, especially cross-country, which is erroneously believed to be "too tough" for them. Properly regulated and supervised cross-country running is not injurious to the high school boy, but, on the contrary, is beneficial to him if he has a normal heart and is otherwise physically sound. Olds¹ conducted tests on five different teams of high school cross-country runners, taking age, height, weight, horizontal and vertical pulse rate, pulse recovery test, urine analysis, heart and lungs, and length of training period, and found that the competitive race (two miles) was not too severe for high school boys having at least six weeks' preparation under supervision. The boys can be overworked in training, of course. In this respect it is better for coaches to be on the safe side by slowly increasing the dose and keeping careful check on the boys who are finally permitted to go out into the full two miles and into competition.

One should not assume that boys should refrain from protracted exercise because they lack endurance, but rather that they lack endurance because they have not indulged in protracted exercise; and, for this reason, they should indulge in moderate, pro-

longed exercise to gain endurance. If, when the period of rapid bodily growth begins, the boy's activity program is curtailed, he will become progressively less able to indulge in activity since the muscles and bones through their elongation will change the timing of the various coordinations to such an extent that each form of activity will become an entirely new exercise; and the heart, as well as the other muscles, will become highly untrained. However, it is not necessary to sidetrack the activity program in order to make way for the growth program, for recent work has shown that activity augments rather than retards growth.²

Rather than allow the heart to confine its activity to the needs of the growing body, and letting the boy arrive at maturity with his heart, as well as his other muscles, untrained, the coach should not only bring him through the adolescent period with his neuro-muscular coordinations intact, but should also arrange the boy's activity in such a way that the heart is trained as well as the other muscles, for a trained heart is a decided asset.³

There is only one way to develop any muscle, including the heart, and that is through exercise, which should be gradually increased in intensity. The heart is built to provide for the needs of all the muscles of the body; and, although one may develop the other muscles of the body by special exercises, the only way to develop the heart is through activity that involves the majority of the muscles of the body. Running and swimming are

²*Physiology of Muscular Activity*, by Edward C. Schneider; W. B. Saunders Co., 1933. Chapter XV, p. 252.

¹*Track Athletics and Cross Country*, by Lloyd W. Olds; A. S. Barnes & Co., 1930, Chapter XI "Physiological Effects of Cross-Country Running On High School Boys."

³*Exercise and Its Physiology*, by Gould and Dye; A. S. Barnes & Co., 1932. Chapter XXIV, p. 384.

practically the only activities that accomplish this. Running is by all odds the more accessible in most communities, and its most pleasant form is probably cross-country running.

Running efficiency

Besides the endurance factor there is another factor that should recommend cross-country running to the scholastic coach: namely, there is no better means of firmly implanting the basic running coordinations in the neuro-muscular systems of the boys. Efficient running is not a "natural" exercise. One finds all kinds of random movements detracting from the efficacy of the main running movements in the untrained runner; and these random movements may, under strain, become accentuated until they seriously impair the basic running movements, and the runner "breaks" in order to slow down the rhythm to a frequency at which he can keep the movements in line. The only way to iron out the irrelevant qualities is through long practice, and the coach and runner will find after a season of cross-country that the running coordinations are so firmly established that they will not break down under any pressure.

Since any normal youth in good physical condition can negotiate a distance of two to four miles across country in reasonable time, proficiency in this sport is more a matter of training and experience than of any special physical qualifications. A judgment of pace and the skill to transport one's body economically over an uneven terrain under varying weather conditions comes only after considerable practice; and it is more important that a boy have these qualifications than that he possess any special "build." Length of bone and size of muscle are singularly unimportant in cross-country running, and one continually finds proficient cross-country runners who do not conform to the hypothetical "cross-country type."

However, there are certain elements that seem to favor a certain type of individual. Since endurance is one of the chief prerequisites of the sport a sound heart and lungs are of paramount importance; but these are the heritage of any normal boy, and endurance is a matter of training. Agility is likewise important, for where the footing is irregular and often uncertain one may not proceed with the easy assurance of a miler on a smooth track, but must continually make adjustments. It is the ability to overcome the natural obstacles on the course with a minimum of effort and a maximum of speed that makes a good

cross-country runner; and this requires coordination, balance, and, above all, agility.

Since endurance and agility are both at a premium it is important that the cross-country runner carry no superfluous weight, either in the form of fat, or of excessive musculature. For this reason the runners generally range from what we might call normal musculature to the slight, wiry type, with a predominance of the latter. The boys with a sufficient minimum of muscle carry less weight, and generally have more endurance.

To a large extent these two factors determine the height of cross-country men as well, for, although in most of the running events on the track where one projects oneself forward in approximately a straight line, length of limb, up to a certain point, is an advantage, here compactness and handling qualities are of equal significance. This would tend to give the advantage to men of medium height; men whose limbs are of sufficient length to make possible a substantial stride, yet not long enough to be unwieldy. Since men of less than medium height can, with training, very often develop a substantial stride; and, since nimbleness and agility are quite often the lot of men of this same build, it is not surprising that cross-country runners are generally either of medium height or below.

Pace

The problem in running is to propel the body forward; and, consequently, any movement that is not directed toward that end has no place in the running movement. It must be remembered that a man runs with his whole body, and not with any portion of his body, nor with any special group of members. Efficiency is attained, not through the development of any special muscle, or set of muscles, but through the development and utilization of all the muscles and faculties of the body. It is by eliminating all movements whose main emphasis is not in a forward direction that a man may improve; and when this simplification of direction and unification of effort is attained the running motion becomes apparently effortless.

The runner should also understand pace: he should know at what tempo his running movements must follow one another in order that he may travel a certain distance in a given length of time. Pace is a matter of judgment similar to the judgment of distance. For some, people this judgment comes rather easily, but for most it necessitates a long period of trial and correction—one keeps trying to

run some distance, such as a quarter mile, in a certain time. After a time the runner can tell fairly accurately how many seconds it took him to run a quarter, or a mile.

Another factor that applies to the running motion as a whole is relaxation, which is, of course, extremely important, and which is, furthermore, more difficult to attain in cross-country running than in track work. The coach and runner must put a little more attention on developing a long, smooth, steady stride in this form of running than in track because the uneven footing fosters tenseness on the part of the runner. The coach should continually remind the men to relax, and "ride with" the ground conditions, rather than fight them.

Steady stride

One might use the term "even stride" to mean a stride the length of which was the same as that of the other strides in the series; but a "steady stride" indicates the temporal length rather than the linear length: that is a succession of strides proceeding with regularity; and it also suggests a certain "direction"—a purposeful quality. The runner learns to take the inconveniences of the course "in his stride"—he's the original of the "knee-action" idea. He runs smoothly and freely even when the going is rough, and he does not break his stride. He may temper it to the conditions of the ground, but it is still "steady."

In dividing the running motion into its component parts one naturally thinks of the legs first. Most coaches advise a stride that is not too long, since an exaggerated stride is tiresome; and this is perfectly sound when one realizes what they mean. A stride that is so long that it requires using the heel as a brake and does not allow the knee to bend easily and follow through is, of course, tiresome, since it wastes energy; and the length of the stride should not be emphasized until it reaches these grotesque proportions. However, one rarely finds a runner with too long a stride; but one is constantly finding boys who expend most of their energy in bouncing up and down in one place. So it would seem better under the circumstances to encourage the men to lengthen their stride, and to teach them to control this lengthened stride, and to make it effective and economical. In lengthening the stride the runner should straighten the leg at the end of the step, not with the idea of driving from it, but with the idea of giving for as long as possible a firm support through contact with the ground for the forward and upward drive of the knee of the opposite leg. This raising

of the knees in front is a factor that will bear considerable emphasis, for one of the first signs of a man's tiring comes from his inability to drive the knee forward.

There is a popular belief that it is almost indecent not to run on the toes; but in cross-country one must forsake decency for some slight comfort in the calves of the legs. The inexperienced runner in trying to light on the heel will merely get a sore heel, but he can learn rather easily to light on the toe and drop immediately to the flat of the foot, rising on the toe only at the end of the stride. This will save overworking the muscles in the calves of the legs, which is one of the commonest causes of soreness in cross-country running. The ability to light flat on the foot without getting a bone bruise on the heel is one of the refinements of technique in cross-country running—comparable to knocking nickels off hurdles; and it indicates that the runner has the movement so finely adjusted that the foot is not needed as a shock absorber to prevent his bumping along the ground.

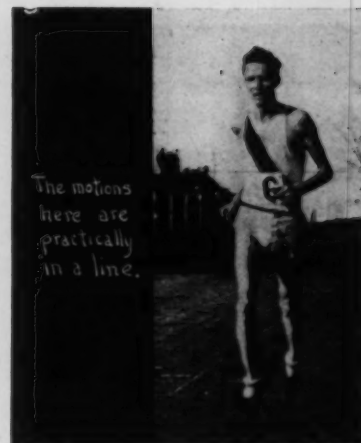
In running all four-footed animals use their front legs to hold themselves up and their rear legs to drive themselves along; and in man, learning to run consists as much in learning to use the arms to carry the body weight, as in training the legs to drive it along. A strong arm action is a vital factor in a long, easy stride; and this action should be forward and backward with the main emphasis on the forward drive. Of course, in cross-country running the arm action is less pronounced than in the dashes, but still there is no point in wasting energy by bouncing the hands up and down in front of the stomach or pushing the hands across the body.

Since running is essentially an effort to catch up with one's center of gravity, which has been placed outside of the body by leaning forward, running then becomes a continuous falling forward in which the legs keep coming up to support the body. For this reason, even cross-country runners should maintain a good body lean. Furthermore, it is less fatiguing to change this posture occasionally; and it is also well to relax, or tell the boys to relax, the muscles of the shoulder girdle, for they are apt to become tense as a result of the balancing movements that cross-country running necessitates.

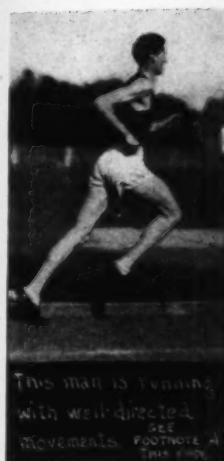
FOOTNOTE "A"—This man is running with well-directed movements, and with every member doing its full share of work. The rear-leg drive is being directed along the vertical axis of the body, which saves the stomach muscles from having to pull it into line. The other leg is being driven forward forcibly by a well-developed thigh muscle (note the relaxation of the foot). The arms are well cocked and driving, as the distance between them shows, but neither is carrying the motion too close to the shoulder level at a point slightly below which it becomes waste motion.



Good form from the waist down. The right heels are trailing the knees and are not rising to hip level. Both have their legs relaxed, about to light on heels.



The motions here are practically in a line.



This man is running with well-directed movements. FOOTNOTE "A" THIS RUNNER.



Ready to go — shoe laces tied double or strapped down with adhesive tape.



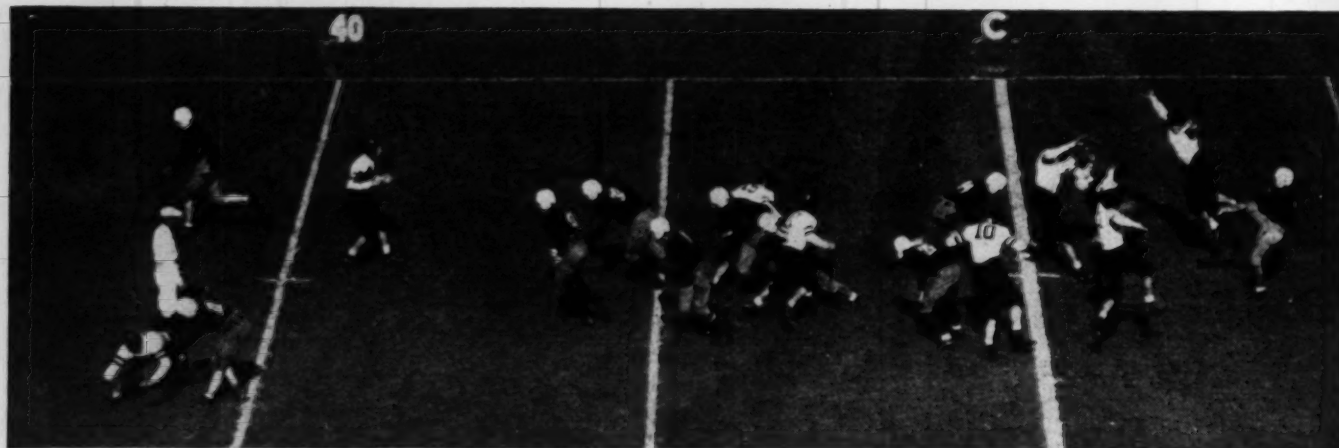
The Finish — Note the flat-footed style of running; and that the knee is not locked when swinging forward. The first and third men have their arms in the usual running position.

On the way. The man at the extreme left has very bad form. Note the twist of his body.



Good Form. The only point that might be criticized is the slight shoulder twist.





RUNNING BACK PUNTS

By William L. Foley

In this article Mr. Foley, the coach at Bloomfield, N. J., High School, carries on the good work he started in the September Scholastic Coach with his "Variations on Receiving the Kick-off."

WHEN an opposing team is in punt formation, their position on the field, the down and distance to go and the time to play, will determine to a large extent what defense you will use, and what your men will do on the different occasions. In other words you will play differently against a team that is kicking from behind their own goal line than you will against a team that is in punt formation in the center of the field on second down.

If you have scouted the team before you play them you will have some very helpful information to assist you in planning your reception of punts: you will know who they are likely to send down on kicks, their speed in getting there, tackling ability, shiftiness and ability to anticipate the opposition's movements. There are likely to be slow men as well as fast men, and there will be loafers as well as hard workers. Plan your blocking for running back punts to care of the first men down, generally the ends; and then plan to take care of the hard workers. The loafers will not bother you, for if they did they would not be loafers.

Now in the first place the best way to run back punts is to block them, or to come so near blocking them that you give the kicker heart failure. This makes him nervous and so he hurries his punts to get them away, and generally gets poor kicks off. Sports writers call these punts breaks of the game and sometimes blame the kicker, but most of the time he did well to get the ball away at all.

Now your punt catcher must use good judgment in placing himself on

the field to handle punts. For instance, if a team is kicking from the sidelines and the catcher plays well out toward the center of the field, and the kicker should happen to kick across the field toward the other side, there is a touch-down looking the ball catcher in the face if he can get it. He will not play so far that he cannot cover the picking team's sideline, however.

Now it goes without saying that the punt catcher must be given plenty of practice on catching punts—high ones, low ones, ones off to one side, bounding ones, ones over his head and every other kind of punt. He must be given plenty of practice, pivoting, stiff-arming, dodging, changing pace, crossing over and "shooting the butt" if he is going to run them back well. All the backs should be proficient in these fundamentals. At the same time, the whole team should be good blockers and be made to feel that a good block or a good tackle is the prettiest thing in football. If your team cannot block, you will not run back kickoffs, punts or anything else.

Three things the punt catcher must remember: first, catch the ball; second, start straight up the field; and, third, don't get the first two mixed.

Diagram 1

Diagram 1 shows the idea of putting two men on a good end to protect the punt catcher. Your ends move out and play alongside or in front of the kicking team's ends if possible. The kicking team must be still when the ball is snapped. When the ball moves, each end will charge the kicking team's end with stiff arms and throw him off balance, at the same time keeping him away from his legs and being ready to come up fast in

case they run with the ball. If the punt is on, the end turns and follows the opposing end back and takes another crack at him while he is trying to get by the halfback. Then the halfback does the same thing, and between the two, the end going down on the kick should be slowed up considerably or dumped.

When the fullback sees that it is to be a punt he sags back and picks the first man who is coming down the center, generally the left tackle, and dogs him or drops him if he gets a chance. All the line men watch the near backs, and then if the ball goes to the deep man they will not be fooled by a quick-opening play. The guards try to get through and block, but if they are delayed they start delaying themselves, thus preventing linemen from getting down the field. They play a little safer than the tackles and the center who have special ways of getting through. I like to have my tackles on their first play against a punt just lower their heads and try to buck a hole through the near back. This shocks him and the next time he will set himself for the shock that does not come. This next time the tackles, especially the left tackle, will drive at him, feint out with the left foot and head, pull back quickly and slip inside of him to block the kick.

Your right guard can often grab the opposing left guard and give him a yank or a push to the side and in that way open a hole in the center of the line for the center to dive through. The blocking spot is about seven yards behind the ball. That is the point to drive for—not where the kicker is standing before the ball is snapped.

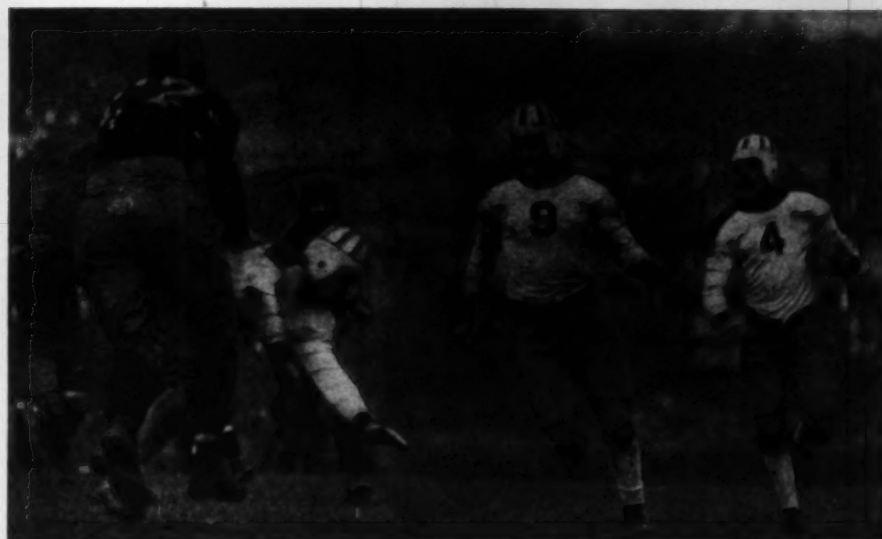
But most of the time the kicker gets the ball away and when that hap-

pens every man on the receiving team except the catcher becomes a blocker and begins to mop up by dropping opponents on the field wherever he can find them and as soon as possible. An opponent on his back where he is is just as valuable to your ball carrier, and more so, than the same man is on his back down the field. The idea is to block—drop one man, then get up and go after another and keep this up until the whistle stops you.

Diagram 2

This diagram shows a six-man line, center and fullback behind the line, two halfbacks and the safety. This is the so-called 6-2-2-1 defense. This is a safe defense for a punt formation, with good possibilities for blocking. Ends play safe. The center lines up behind his left tackle one yard. The left tackle drives through at the first back and tries to get through just behind him and in front of the second back. His main object is to decoy the first back to turn away from the line and block out with him and pass him on to the second back so that the center, who is following close behind, will slide through on the inside and have a clear lane to the blocking spot. This method can be reversed and the fullback can go through on the right behind the right tackle. Of course, the line men *watch the near men*. The fullback on the first method sags back and to the left watching for a run or a pass and at the same time is ready to block or dog the first man coming down the center, paying special attention to opponent's best man or their left tackle.

The halfbacks sag back and pick up the end coming down on his side and force him to run wide and follow



him closely, keeping on the inside. When the halfback gets down the field and the end is coming in he leaves this man and crosses over and blocks the end out who is coming down on the *opposite side of the field*. This allows the punt catcher to cut over their tails and go up the center and pick up his blockers who have tried to block the kick and are coming back down the field to help him out.

Diagram 3

This is a block which may be used when the opposing team is kicking from behind their own goal line or deep in their own territory when they have waited until the fourth down. It explains itself. Pile the whole line in on the kicker. A blocked kick here generally means a touchdown for you. The halfbacks can play a little wider and be on the lookout for "crazy stuff." The halfbacks pick up their ends and block out if the ball is down

the center, either in the regular way or as shown on Plate VI. If the ball is kicked across the field at an angle here and the punt catcher is awake and can catch the ball, there is a good chance for a long run back or a touchdown. In this case the halfbacks try to block the ends in while the linemen swing back in the direction of the ball and try to form a screen, dropping backs and opposing linemen as they find them.

In all these plays, the three for kick-off reception and the three here, the emphasis is on blocking and blockers. In Diagram 1 here you will notice that there are five men back with the punt catcher, blocking for him; and that the linemen who have gone in to block the kick are expected to swing back into the play and go to work blocking men if the kick gets off. Of course, every man on the team must know what plan is on, and the signal can best be given by either the center or the fullback.

DIAGRAM 1

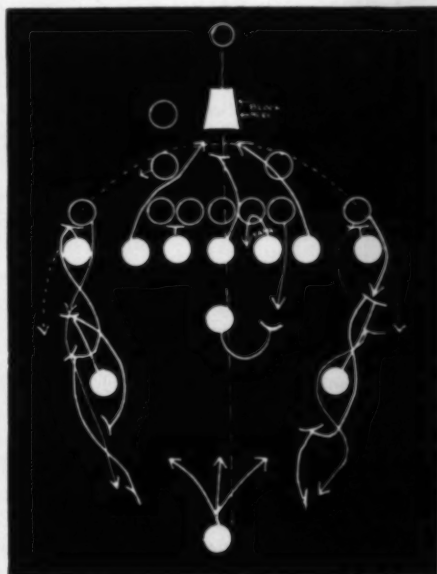


DIAGRAM 2

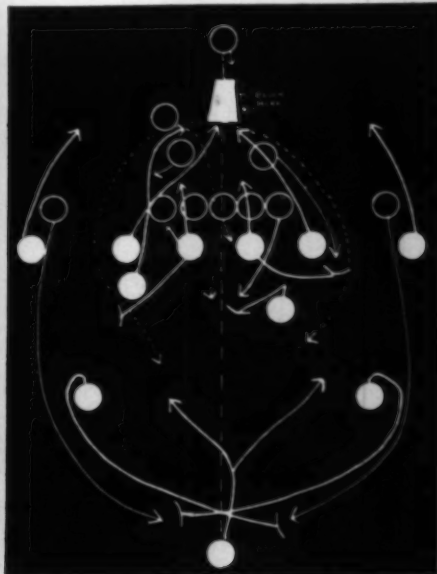
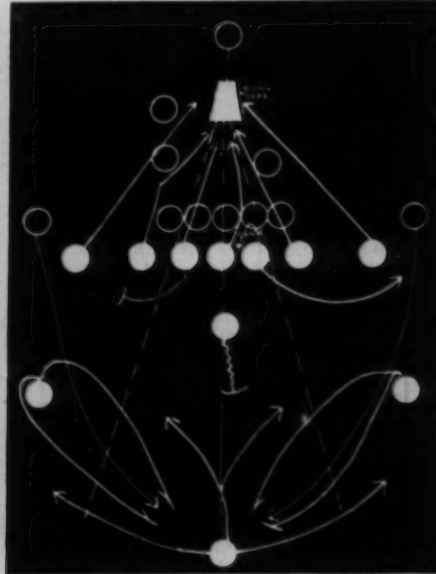


DIAGRAM 3



SCHOLARSHIP AMONG HIGH SCHOOL ATHLETES

By Clarence Hines

The plan at Pendleton, Oregon, High School for improving the scholastic standing of athletes

The plan explained by the writer of this article is designed to make better scholars out of athletes and better athletes out of scholars. With many another coach, Mr. Hines likes to have his athletic program so oriented to the general objectives of the school that it will appeal to all types of boys.

THE day having passed when athletes made their initial appearance of the week at school on Friday afternoon just in time to dress for the game, those in charge of interscholastic athletics in the well-balanced school are giving considerable time and thought to methods for improving scholarship among athletes. It is not sufficient that the members of the school's representative teams be merely "passing" in their school work, for if a majority of the players are just one step ahead of failure the condition is not one that sets the right example for the student body. After all, these players are representing the *whole school* and not merely the athletic department.

The fans and public opinion as formed by the sports pages may approve of a winning football team that wins nothing else, but the school ought not.

Because eligibility is a matter of importance in the development of representative school teams, considerable attention has been given to various devices for keeping athletes above the danger line and in encouraging the border-line ones to apply themselves more diligently to their studies so as to be well over on the safe side. This attitude of encouraging study not so much for its own sake but for the sake of the team is being challenged by some progressive educators as being unsound psychologically; that unless genuine interest is aroused in the pupil for the work he is to do, the reward stimulus of athletic eligibility may succeed in getting the athletic pupil to "do his lessons" passing fair, but will not educate him in the true sense.

This criticism is, in my opinion, more of an attack on the present system of prescribed courses and of grading than it is on the procedure which requires athletes to be scholastically eligible. In this respect athletics is ultra-progressive: athletics does not observe the grading system, but asks only that the player be "passing." "Passed" and "flunked" are the only grades athletics observes. Athletics

will fit in nicely with whatever state of progressivism education comes to. Athletic directors and coaches doing their work today under the present system must, of course, face reality and play their game according to the current rules.

Every coach knows that many a star athlete who is down as a "flunker" would also be a star in some other field besides athletics if only the school were capable of arousing his interest in something else. The school is slowly coming around to a realization of this value in education, and would go much farther and faster were it not for the conservative cry of "frills" and "fads" that issue forth from money-scared

ing regularly in games which are a regular part of the intramural program.

The purpose of this paper is to show how we are trying to improve scholarship among boys who participate on teams under the eligibility rules of our state athletic association.

Figures on athletes in this school, a public high school with an enrollment of about 500 boys and girls, for the spring semester of 1933, reveal some interesting things with regard to the efficiency of a system for encouraging better scholarship among boys participating in sports. Of the 240 boys enrolled, 51 participated in interschool contests. Among the boys enrolled there were 47 who failed in one or more subjects while there were only five athletes who failed in a subject. There were 19.5 per cent of all the boys enrolled who failed a subject and only 9.8 per cent of the 51 athletes. The boys participating in athletics comprised 21.2 per cent of the total number of boys enrolled but only 10.6 per cent of the total failures.

Honor Society Comparison, Pendleton High School

Society	No. of Boys Members	No. of Lettermen Members	No. of Athletes Members	Pct. of Members Lettermen	Pct. of Members Athletes
Torch Honor	10	3	4	30.0	40.0
National Honor	7	3	5	42.8	71.4
Quill and Scroll	11	4	5	36.3	45.4
National Athletic	26(a)	12	12	42.8(b)	42.8(b)

(a) Total number of lettermen in school.
(b) Percentage of all lettermen who made the National Athletic Scholarship Society.

taxpayers oblivious of real values.

It is well recognized that not every student, athlete or no, of low mental development and sluggish interest in worth-while activity can be aroused to an active and sincere participation in some accepted phase of school work and life. It is the school's task to do its utmost, with the aid of the best knowledge of the day, to direct these sub-normal or one-sided pupils into better balance. Few cases are ever hopelessly beyond improvement.

The athletic coach has for his representative teams pupils who are doing passing work according to the school's standards. All others in school, including the athletes who have flunked in their school work but who certainly must not be denied the benefits of physical education, are provided for in the intramural program.

In our intramural program, which we consider is well worked out, we give due consideration to the fact that boys should be permitted to participate regardless of their scholastic standing. Boys who have failed in classroom work, those who have completed their interscholastic competition, and others who are ineligible under the rules of the Oregon High School Athletic Association, of which Pendleton High is a member, are play-

The accompanying table showing honor society comparisons for this school is further indication that the athletes do not suffer from poor scholarship. The requirements for admission to these societies are sufficiently high to put a premium on scholarship. Under a grading system which uses marks of 1, 2, 3, 4, and 5, with 1 being the highest mark and 5 being a failure, the following averages must be made in order to be eligible for membership: Torch Honor Society, 2 or better; National Honor Society, 2.2; National Athletic Scholarship Society, 2.8; Quill and Scroll, international honorary society of high school journalists, upper third of the student body. The table indicates how successful athletes have been in meeting these requirements.

The basis of the plan followed to promote better scholarship is the weekly eligibility blank reproduced herewith. This blank, in mimeographed form, is placed in the mail box of all teachers on Monday of each week and is to be filled out and turned in to the principal's office by the close of school on Tuesday. Any weakness in a boy's class work is immediately detected and steps to correct the weakness are taken [Concluded on page 28]

New Film

on Football

WHAT is perhaps the most complete, professionally-made moving picture film of football technique is the Eastman classroom film, *Modern Football Fundamentals*, issued by Eastman Kodak. Harry Kipke directed the film.

The film is in two reels, Reel 1 containing drills for individuals and small groups, Reel 2 the large-group and team drills. Reel 1 includes sequences on the following individual fundamentals: holding and shifting the ball, close-line pivot, the side step, the straight arm, catching a punt, catching a forward pass, picking up the ball, falling on the ball, the back-field stance, handling the snap-back from center, handling the ball on spinner plays, handling the ball on lateral passes, blocking, tackling, the forward pass, the punt, the place kick.

Reel 2 contains: the offensive line, the straight-ahead charge, linemen in interference, the end run, blocking for the passer, blocking for the kicker, the weak-side play, the spinner play, the cut-back play, the lateral-pass play, the defensive line, the six-man line, the seven-man line, defensive guard play, defensive tackle play, defensive end play, blocking kicks.

The Eastman people, Coach Kipke and his players have turned out a workmanlike film, good in organization, direction and photography. Kipke, well known for his ability to teach the game not only to comparatively uninformed players but to trained coaches (as witness his success as instructor in numerous coaching schools), proves himself equal to this new occasion. The medium



suits him, and the only thing to be regretted by this commentator is that Kipke's voice is not heard.

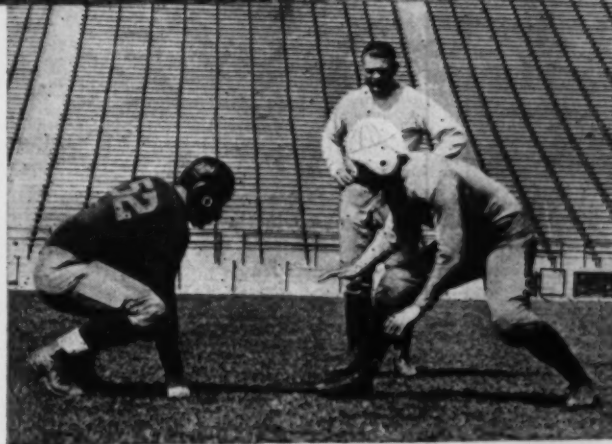
For many coaches the silent film of this type is preferable to the sound film. With a silent film the coach who is showing the picture can make whatever remarks he likes, commenting on the demonstrations, citing this and that point for emphasis.

Slow-motion is used to good advantage in many of the demonstrations. The technique is shown in very slow motion and then followed by the same technique at normal speed. As an aid to coaching the value of these slow-motion scenes can hardly be overestimated. Any coach who has used the moving picture camera in his work is well aware of the teaching power it exerts.

Five excerpts from the Kipke film are shown on this page. In the top picture Coach Kipke is demonstrating with a player one of the simpler techniques—holding of the ball by the ball-carrier so that it is firmly lodged and protected in one arm, freeing the other for straight-arm work. The fingers of the holding hand are spread over the tip of the ball to give the maximum control over

it. The other point of the ball is held fast under the arm.

Directly below the top picture is a shot of the warm-up drill, taken by a second camera from the stadium. Below this, to the left, the ball-carrier is demonstrating the side-step with the fadeaway of the hips; to the right the place-kick is shown. For the right-footed kicker the holder kneels on the right side, using the fingers of his left hand to contact the ball at the top. J.L.



COMMENT ON THE 1934-35 BASKETBALL RULES

By H. V. Porter

The new rules remove many of the causes of misinterpretation and misunderstanding

Mr. Porter, an official of the Illinois High School Athletic Association, is a member of the National Basketball Committee, and co-editor of "Basketball Play Situations," a publication of the National High School Federation.

WHILE it is a little early in the season to arouse any great amount of interest in a discussion of basketball rules there are several matters connected with rule changes which might profitably be given consideration early in the season.

There is a slight change relative to the basket requirements. The change specifies the size of the ring and permits the use of side braces provided they are properly placed so they will not interfere with the ball. The chief significance of this change is in the realization on the part of basketball authorities that many schools are lax in giving attention to the basket rings and nets. If a basket ring is unstable it has a considerable influence on the action of the ball. Also if a ring sags in front even as much as one-fourth inch it often makes the difference between a successful and unsuccessful try. The change in rule should direct attention to some of these matters. A sloppy-looking net on a basket or a dirty backboard or a ring that rattles detracts considerably from the enjoyment of players and spectators.

The new rules authorize a ball 29½ inches in circumference. This smaller ball should result in better ball handling and probably in slightly larger scores. The chief advantage should be in the more accurate passing and more expert dribbling and shooting. During the last year or two there has been an increasing amount of one-hand shooting and passing and there has been a tendency to develop the use of both the right and left hand in the handling of the ball. This is a step in the right direction and the smaller sized ball should result in rapid progress along this line.

May report to umpire

The rules makers have also given attention to the problems of the scorers. In many contests the matter of scorekeeping has been delegated to anyone who happened to have a pencil and could be prevailed upon to take care of the job in return for a seat in the front row. The fact that captains are now required to supply names and numbers of players two minutes before the time for the game to start should help emphasize the necessity for competent scorekeepers.

Another matter of detail that has received attention in this year's rules is that in connection with players' numbers. Coaches are instructed to omit numbers 1 and 2 because they are so often confused with the signals which officials give in indicating the number of free throws

following a foul. There is also a provision requiring that these numbers be of a solid color. This is to prevent the deception which some coaches have used in providing outline numbers which could not easily be read.

Giving the referee and the umpire equal authority except where each makes a different decision on the same play should slightly speed up the game. It will now be permissible for a substitute to report to an umpire if he is more convenient than the referee. Also the umpire will have authority to call time out or to decide on almost any situation that may arise on his side of the floor. This change in rule will tend to prevent one official from loafing or from shifting responsibility in case there is a questionable decision.

Official out of bounds

There has been some discussion as to whether the official has authority to call a held ball when the ball is not in the grasp of two players of opposing teams. This matter at one time was influenced considerably by the five-second rule which stated that if a player maintained a position within three feet of an opponent who was holding the ball the official should call a held ball after five seconds. This rule no longer applies to the back court but it does operate at times in the front court. However, this does not prevent an official from calling a held ball in less than five seconds if in his opinion a player is closely guarded and is making no attempt to get the ball in play. This is a result of the feeling on the part of rules committee members that stalling tactics should be eliminated wherever possible.

The various out-of-bounds situations have always needed considerable interpretation. Prior to this year there was a question as to whether the official who was standing on a boundary line constituted "an object out-of-bounds." This matter is definitely provided for in the new rules and if the ball strikes an official in such a location and bounds back in the court the ball is out-of-bounds.

The question of whether possession is necessary before it can be ruled that a dribble has started once caused considerable discussion because the term "possession" was used in one of the approved rulings in such a way that it led to the belief that a player must have possession before he could start a dribble. This matter is taken care of in the new rules. It provides for the situation where a player instead of receiving a pass taps it in the air and then continues his dribble. The first tap is part of his dribble. It should be noted, however, that this does not apply in case he taps the ball from the hands of an opponent and then secures possession. This interpretation has a bearing also on the case where a player receives

the ball in his front court from out-of-bounds and while still holding the ball it is touched by an opponent. This does not deprive the player of the privilege of returning the ball to his back court. There is a related situation where a player who is pivoting near the sideline pivots into an opponent who is standing on the sideline. In this case the ball is out-of-bounds but it is considered impossible to tell who caused the ball to go out-of-bounds and, therefore, the ball is tossed up near the boundary line.

The section dealing with overtime games in high school has been simplified through prescribing rather than recommending the method by which overtime games shall be decided. The question has often been asked as to why the rules committee often recommends a new procedure rather than making it mandatory. The reason for this is that most coaches are ultra-conservative and their first reaction to any proposed change is usually adverse. In many cases, however, the matter works out satisfactorily after a trial. In the case of overtime games in the high school there would have been considerable objection if coaches had been compelled to accept the "sudden death" method of deciding the game. Since the matter was recommended the opposition was not so pronounced and after two years of use the rule has come to be almost universally accepted. The rules committee now feels they are justified in making the provision mandatory.

Must "hand" the ball

Probably most of those who object to any of the changes in this year's rules single out the change which requires the official to *hand* the ball to the proper player out-of-bounds rather than to pass the ball to him. This change was adopted because of the feeling that there were still a considerable number of cases where there was misunderstanding as to which team the ball belonged after it had gone out-of-bounds. This resulted in some unfair situations. If the official must *hand* the ball to the player there is no reason why these misunderstandings should continue to exist. There was also a feeling that the alert official will usually be near enough to the ball in such a situation so that no time will be wasted through the change. In those few situations where the official is at such a distance that teams will have to wait until he comes across the floor there would probably be cause for misunderstanding anyway. If this change does not result in wasting time it should be very satisfactory.

Another step in the direction of eliminating circumvention of the rules is to be found in the rule which prescribes that time out is to continue after any free throw until the basket has been missed or if made until the ball is tossed at cen-

[Concluded on page 29]

2 out of 3 wear...

Bike



● It isn't just an accident when two-thirds of the nation's scholastic athletes wear one brand of athletic supporter. Bike's 60-year-old reputation as the coaches' favorite supporter is built on a solid, 3-point foundation:

- 1. DESIGN.** 60 years of experience have helped Bike to work out the best design for comfort, freedom of action and maximum protection.
- 2. MANUFACTURE.** Experience and continuous experiment are responsible for Bike's absolutely smooth, uniform webbing. Non-curling. Non-shrinking. No sizing is used. No wonder Bike stands a lot of punishment and any number of trips to the laundry!
- 3. PRICE.** The Bike combination of high quality and low price is the result of experienced management and constant search for better methods. You get the "world's standard athletic supporter" at prices that make the treasurer happy.

For these reasons, 2 out of 3 wear Bike. For these reasons you'll find it pays to standardize on Bike.



* Established by nation-wide survey recently made by A. C. Nielsen Co.

U F A C T O R I N G C O M P A N Y

RESIDENT • 41 WEST 25th STREET, CHICAGO

SALES AGENTS: A. S. Callaway, 275 Broadway, New York. Martin & Martin, 5 South Wabash Avenue, Chicago. McDonald & Linforth, 420 Market Street, San Francisco. John H. Graham & Co., 113 Chambers Street, New York. H. B. Hughes, 839½ North Beckley Avenue, Dallas.

FROM COACHING SCHOOL NOTEBOOKS

This is the second and final part of the symposium giving technical reports on football and basketball courses offered at some of the leading coaching schools during the past summer. Doane College, Kansas State High School, Washington State, Texas Tech and Lafayette were reported in the September issue.

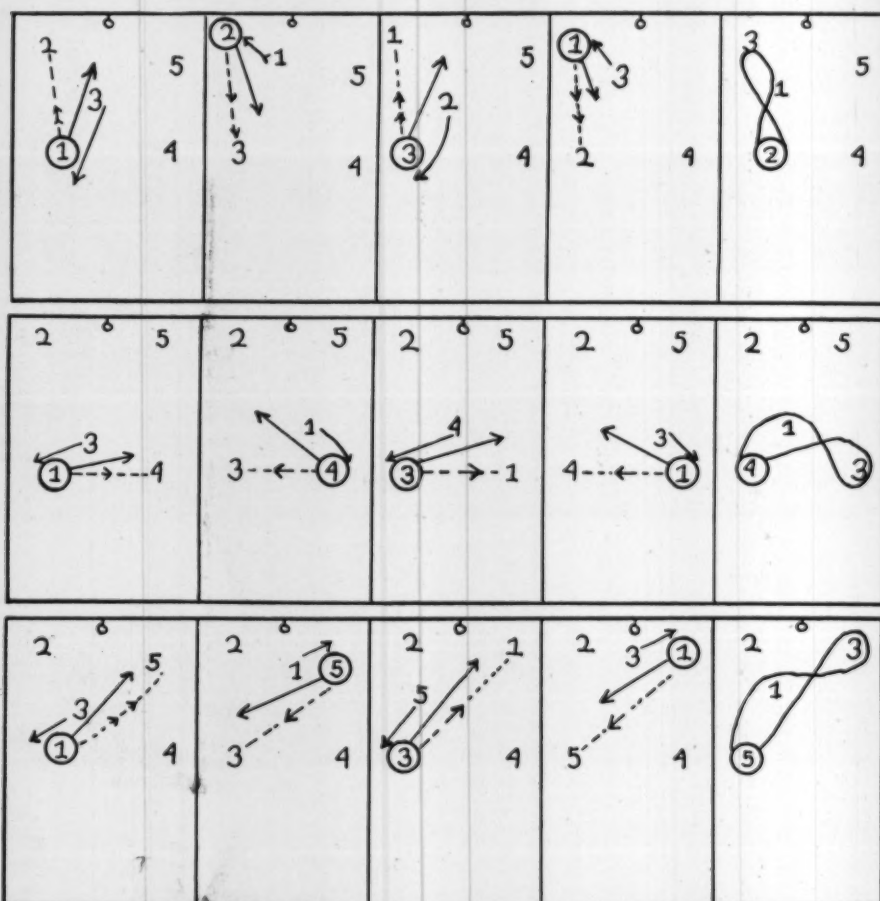
Carlson's basketball

Dr. H. C. Carlson, basketball coach of the University of Pittsburgh, gave his basketball course at Manchester College, Shaker Heights Coaching School (Cleveland) and Colgate University during the past summer. Dr. Carlson has prepared for Scholastic Coach the following description of the basketball offense he presented at the coaching schools.—Editor.

A KNOWLEDGE of the past events in any field is conducive to better work in that particular field. Clergymen know religious history. Medical men know the history of medicine. The lawyer knows the history of law. The engineer knows the history of machines. There is a biological law that "ontogeny recapitulates phylogeny," i.e. the individual is the history of the race. The aeroplanes of the present day include the good points of aeroplanes of bygone days. Our present locomotives include the best values of past locomotives. The finest product generally is not an accident, but is the result of evolution. Each advancing article strives to go forward and incorporate the best of similar articles. Football and basketball systems follow this general scheme.

The evolution of basketball offense can be the guide for coaches in various grades of reception, experience, and projection. The coach can pick his limit and only handle what has been evolved to his level. He can recapitulate the previous outstanding good into the system of his level. He can reiterate the outstanding points by the use of a practice outline which can portray the evolution of basketball offenses. He does not need to go so deep that he will become lost and confused. A complete understanding and proper handling of a system at his level gives a happier situation than the bewilderment which accompanies the teaching of a system that is not thoroughly known. Understood simplicity is more efficient than misunderstood complexity. There is greater stimulus to starting simply and growing into the more complex.

We trust we have justified the value of the following evolution of basketball offenses. Individual ability will always assert itself. Superiority has a way of standing out in any field. In basketball, team strength depends upon the strength of the individuals. The ability of the individual depends upon his mastery of the fundamentals. When the individual meets his equal or superior, he must evolve additional means to triumph. The individual must call for help from another. In the early game of basketball the individual stood out in the chotic play. When he was



Carlson's continuity of three men. The "Figure 8" or "Triangle" offense

stopped he had to call on a teammate and this was the start of the evolution of more diversified offensive tactics.

You can visualize a regular game or an alley game. One big strong fellow A, may order a smaller teammate B, to sneak down under his basket and wait for a long pass. The opposition will soon cover B, under the basket and nullify this type of offensive. B will now come away from the basket to get a pass and can return to A, going into the basket. The mastery of all the possibilities of play between A and B is the bases of success for any combination of more than two players. The two men, to master the pass and return and the pivot play, will develop a strong offensive, even without a third, fourth, or fifth teammate.

If the opposition becomes too strong for A and B, they may call in teammate C. With the introduction of a third member into the offensive combination, new technique must be developed. Where will the receiver go? Where will the passer go, and why? The receiver may go toward the basket to be closer to the basket for a shot. The passer could hardly get in front of his receiver because of possible collision. The passer goes behind his receiver for three reasons. First, he will know where to go. Second, he will be a safety man to follow his pass. Third, he will be in position to receive a return pass. When the receiver gets the ball he may

shoot, dribble, pass to a third man or return to his passer in the combination previously evolved. This method of offense has previously been described as the over and around as related to the passer. The difficulty of this system is that an opponent impedes the progress toward the basket of the expected receiver. Another defensive man, who observes the defensive fundamental of keeping between his opponent and the basket, will obscure and interfere with the passer. These two reasons are ample stimuli to the evolution of more advanced offensive technique.

If the expected receiver will cut away from his basket he will have less opposition in receiving a pass. If the passer passes away from his basket, he will have less interference with his pass. This can bring about a different sequence than the over and around method. After this pass back, the passer can cut toward his basket in front of his receiver because the receiver has gone away from the basket. This has been termed the man ahead of the ball offensive. Many variations in lines of travel may be developed including crosswise, lengthwise and diagonal. The variations may include the over and around of three men, the combination of two men, and as always, the work of the individual. Let us reiterate that any good system must recapitulate the good points previously developed. This is the system to be presented

[Continued on page 30]

SEND FOR
FULL-SIZE
BOTTLE AS
SAMPLE

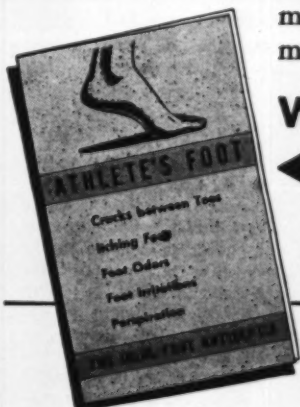


DON'T LET ATHLETE'S FOOT GET A FOOTHOLD

Zonite is the great enemy of "Athlete's Foot." This powerful (but non-poisonous) germicide kills the ringworm parasites that bore into the skin when the boys carelessly expose their feet around locker rooms and swimming pools.

It's a sneaking disease, this "Athlete's Foot," and it can cause no end of trouble. Talk to the boys about it and teach them how to protect themselves.

A daily routine for treatment and suggestions for precautionary measures are given in the booklet, "Athlete's Foot." Send for as many copies as you want. *Every boy should have one.*



Write down the number of copies you want.

← Plenty for everyone!

ZONITE PRODUCTS CORPORATION
Chrysler Building, New York, N. Y.

SG-410

Please send me free bottle of Zonite, also.....copies of direction folder.

Name.....

Address.....

City.....State.....

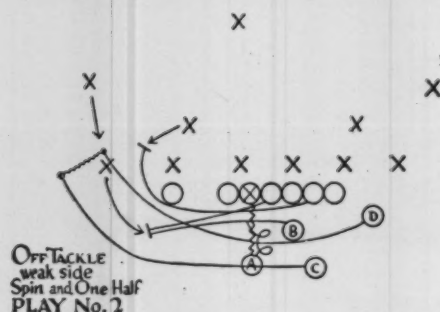
New books on the sportshelf

Rose Sequel

LOU LITTLE'S FOOTBALL. By Lou Little and Arthur Sampson, 224 pp., diagrams. Published by the authors. \$2.

LOU LITTLE'S Football, a compact volume in the production of which Lefty Lou himself, the celebrated coach of Columbia's Rose Bowl champion, has been aided by Arthur Sampson, coach, scout and newspaperman, is essentially an honest book, striving to be just what it calls itself.

Our Mr. Little holds nothing back. He diagrams his own plays for you—



(Diagrams and explanations from "Lou Little's Football")

This is one of the best ground gaining plays we have. It is especially effective against a defense which is over-shifted to meet the strong side plays. A makes a complete spin while faking to pass the ball to C. C covers up after crossing behind A, and fakes carrying the ball around end. A completes a full spin and pivots halfway around on a second spin before handing the ball to D. D takes the ball from A and carries it off-tackle behind one of the running linemen. After C carries out his fake he should continue down the field and get into position to take a lateral pass from D. D should have the option of making his lateral. If the lateral is thrown just before the defensive right halfback comes up to tackle D, a long gain is certain.

and I can guarantee that he does it accurately; and goes with conscientious detail into his own technique and methods of training. It is obvious that if he has neglected to discuss certain things he has done it through oversight or because he felt that it would not interest outsiders.

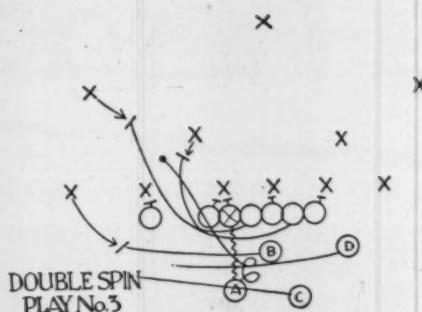
The book is methodically compiled, starting with terminology, moving up through position play, offense, defense, scouting and the handling of players and terminating with a chapter for the spectator on how to watch the game. It is not a flashy book and in no sense one that would appeal to anyone who is not, by profession or bent, devoted to the game. It is not an addition to literature as such and it would make a better general impression had more care been exercised in the editing and proofreading. It seems to have been rushed through production.

Aside from these shortcomings, the book is an authentic delineation of what some intelligent people are beginning to believe is the outstanding football system of the present day. To those of us who have been close to Little since he came to Columbia four years ago it contains nothing new.

It occurs to me that the coaches of Columbia's rivals might well profit by reading this book, for it certainly is the best available scouting report on the Columbia system to date. Little cites the weaknesses of his own defensive system. He points out that a pitching lineman can be "mouse-trapped" if he can't be ridden back; that crashing ends, though they close the tackle hole, can be circled. Little's linemen play on both hands and bore straight in with head and shoulders. His ends crash 95 percent of the time.

It may be seen that the book is forthright. It is also modest, for though it makes out a case for Little's football it does so without reflection on the diametrically opposed ideas of others. The author, or rather the authors, say in effect: "There are two ways of doing this. This is why we like our way."

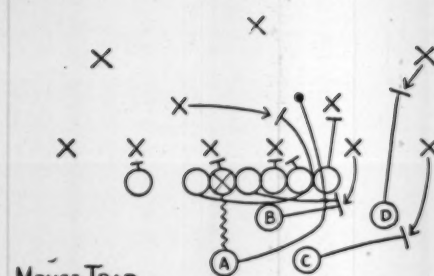
The six-man "billy-goat" line defense in which ends and guards play almost alike, the head-and-shoulder



This play is effective when used as an alternate to plays 1 and 2. It is especially effective when the defensive right tackle takes a position outside the shoulder of the offensive left end. A makes a complete spin while faking to pass the ball to C, and another complete spin while faking to hand the ball to D. The first running lineman helps the offensive left end carry the defensive right tackle out if necessary. If the left end can handle the defensive right tackle alone, this first running lineman goes through the hole.

block, the high tackle . . . these are some of Little's basic stocks-in-trade. It is true that he makes an effort to sell them to the reader, but he does it without running down the theories of associates and competitors.

I suppose the motive behind the book was to make money but the authors have steered entirely away from the hokum that might have made the work popular. It is all but barren of incident, and the few episodes from



MOUSE TRAP
PLAY No. 6a

Against a fast charging defensive tackle the mouse trap play is very effective. The idea of this play is to allow the defensive tackle to make his charge across the line of scrimmage and then block him out of the way before he has a chance to get his hands on the ball carrier.

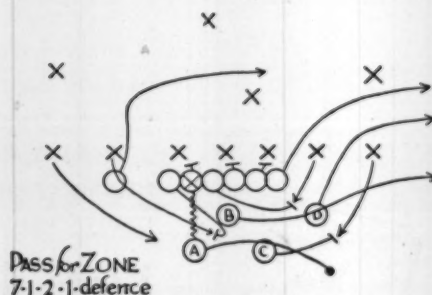
past games which are inserted occur in brief form and merely for the sake of illustrating some obscure point.

The play on which Al Barabas ran for a touchdown against Stanford, known in the Columbia repertory as "KF-79," is diagrammed; also the play that set it. There is an intelligent discussion of forward-pass defense and a faithful description of the Little system of shifting from zone to man-for-man coverage to suit the occasion.

The actual writing of the book was done by Sampson, who formerly coached at Tufts, Columbia and Harvard and is now writing football for *The Boston Herald*. This does not make it any less Little's book. Sampson knows Little's football as few others do. It is obvious that there was a genuine collaboration.

It is a book for the student of football and, in my opinion, one of concrete worth for those who teach the game.

STANLEY WOODWARD



PASS for ZONE
7-1-2-1-Defense

A takes the ball from center and starts toward the flank as if to make an end run. After faking a run for a few steps, he fades back to make the forward pass. C blocks the defensive left end. The running guard on the right of the center blocks the defensive left tackle, while the guard at the left of the center blocks the defensive right tackle. A makes an optional pass to any of the eligible receivers. One is certain to be free since it is impossible for the defensive left halfback and the backer-up to cover all four eligible receivers and the other members of the secondary are in no position to protect against a pass to any one of these four receivers.

For THE FASTER, SURER FOOTWORK THAT WINS GAMES



Ball-Band "Officials" on the feet of a fast, alert basket-ball player offer a combination hard to beat. And no wonder! This strong, husky shoe has all the qualities of a winner — flashing, sure-footed speed; light weight; snug fit; and real comfort.

Keen, experienced coaches the country over are equipping their players with Ball-Band "Official" — the new and finer shoe with the famous non-slipping, self-cleaning Super Sole.

Just run your eye down the list of outstanding Ball-Band "Official" features. Don't you want *all* of them in the shoe your team wears? Remember, only Ball-Band "Official" has them all!

For further information—and the name of the nearest Ball-Band dealer—write today to MISHAWAKA RUBBER & WOOLEN MFG. CO., 319 Water Street, Mishawaka, Ind.



NEW . . . A Kangaroo "Official"

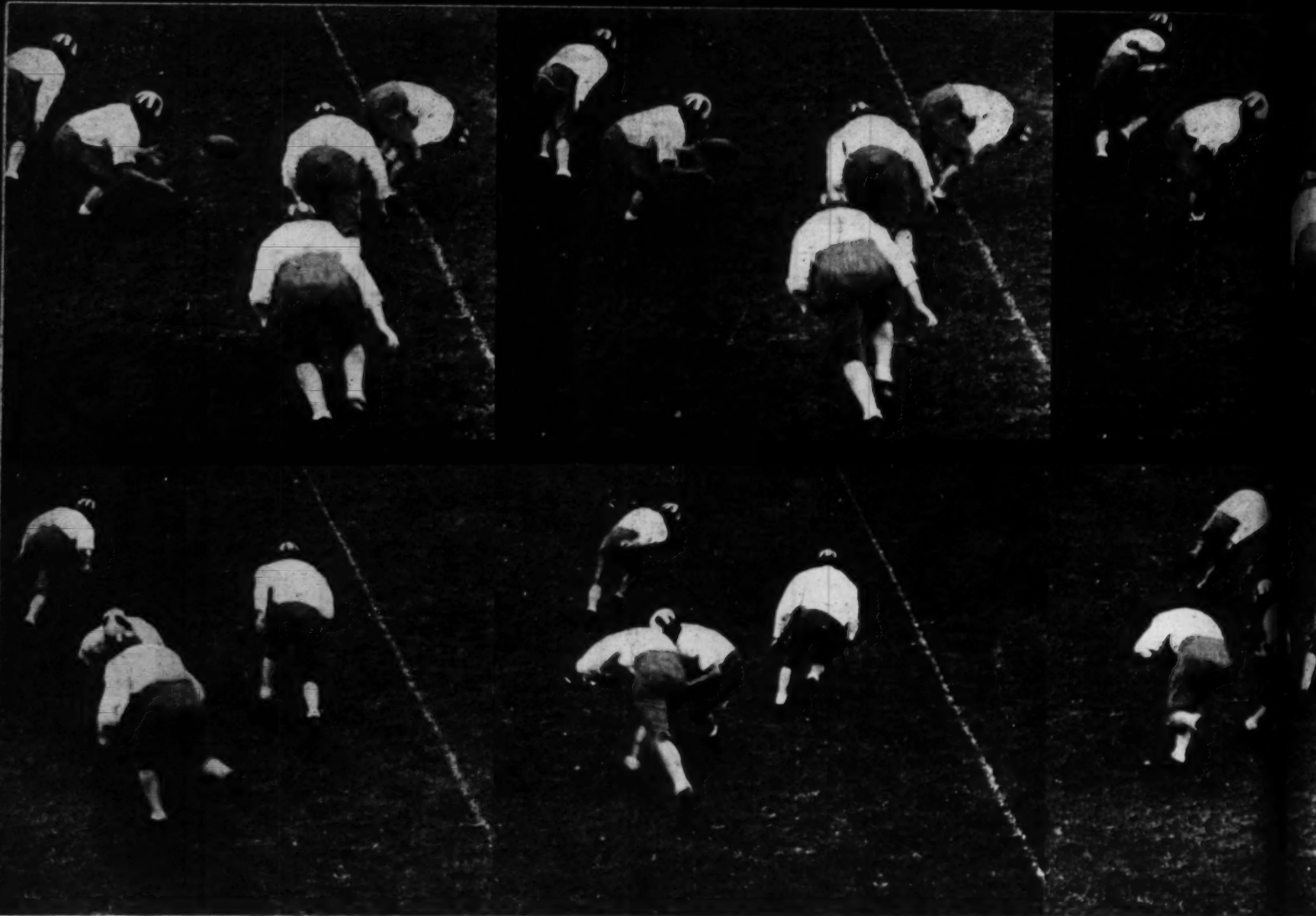
Ball-Band has just brought out a new "Official" that combines the important features mentioned on this page (including the genuine non-slipping self-cleaning "Official" sole) with the lightness and toughness of a genuine kangaroo upper. Ask to see it when you are outfitting your 1934-35 basket-ball team.

20 BIG FEATURES

Now, for the first time, all the features desirable for basket-ball have been combined in ONE shoe. No other shoe offers them all.

1. Light weight—easy to carry—but rugged enough to stand the gaff.
2. Snug fit—narrow at shank and heel to support foot and prevent slipping at heel.
3. Sponge rubber cushion heel and arch prevent bruising.
4. Built-in arch support of special design—just enough for comfort.
5. Ventilating eyelets at shank, to help keep the foot cool. Special ventilators at toe optional.
6. Outside saddle for support.
7. Inside and outside back stays for added strength.
8. High-grade loose duck lining for flexibility, coolness, comfort and longer wear.
9. Special high-quality black duck upper, 3-ply at instep and vamp where the extra strain comes.
10. Eyelets set back from toe—can lace tight without cramping toes.
11. Superior nickel eyelets (grommets) securely anchored.
12. Comfort-style lace stay prevents blisters on top of toes.
13. Tongue is formed to lie smooth; felt lined to prevent wrinkling or slipping and to keep laces from chafing the instep when laced tight.
14. Special loops for holding tongue in place.
15. Counter sewed to lining—no wrinkles.
16. Non-absorbent "Super" (insulating) insole.
17. Brown sole, non-marking, molded with sharp, even edges in a special sure traction pattern. Edge raised to cushion the foot—corrugated to prevent slipping.
18. Pivot block—sole extra-thick under big toe joint—prevents burning of feet—and provides added wear.
19. Sole is self-cleaning—does not glaze over with dirt and wax from floor and become slippery.
20. To lessen interference and stumbling, the toe strip is made of thin but extra tough, non-marking rubber.

BALL BAND



GENERALSHIP

Mr. Wade is director of the department of physical education and athletics and coach of football at Duke University, Durham, N. C.

GENERALSHIP is the act of selecting the play that has the best chance of accomplishing your purpose with your team against the particular opponent that you are playing. In order to exercise good generalship it is necessary then that a quarterback realize what his purpose should be on a particular play or on a series of plays; he should also know the capabilities of his own team as well as the strength and weakness of the opponents.

We believe that a quarterback should play percentage in selecting plays; that is, he should try to select the play that will accomplish his purpose more times than any other play if tried a given number of times under exactly similar conditions. The quarterback may select the wrong play and make a good gain, or select the right play and fail. That is the unpredictable element which is present in every-

thing, and without which a game would not be a game.

Comparative strength

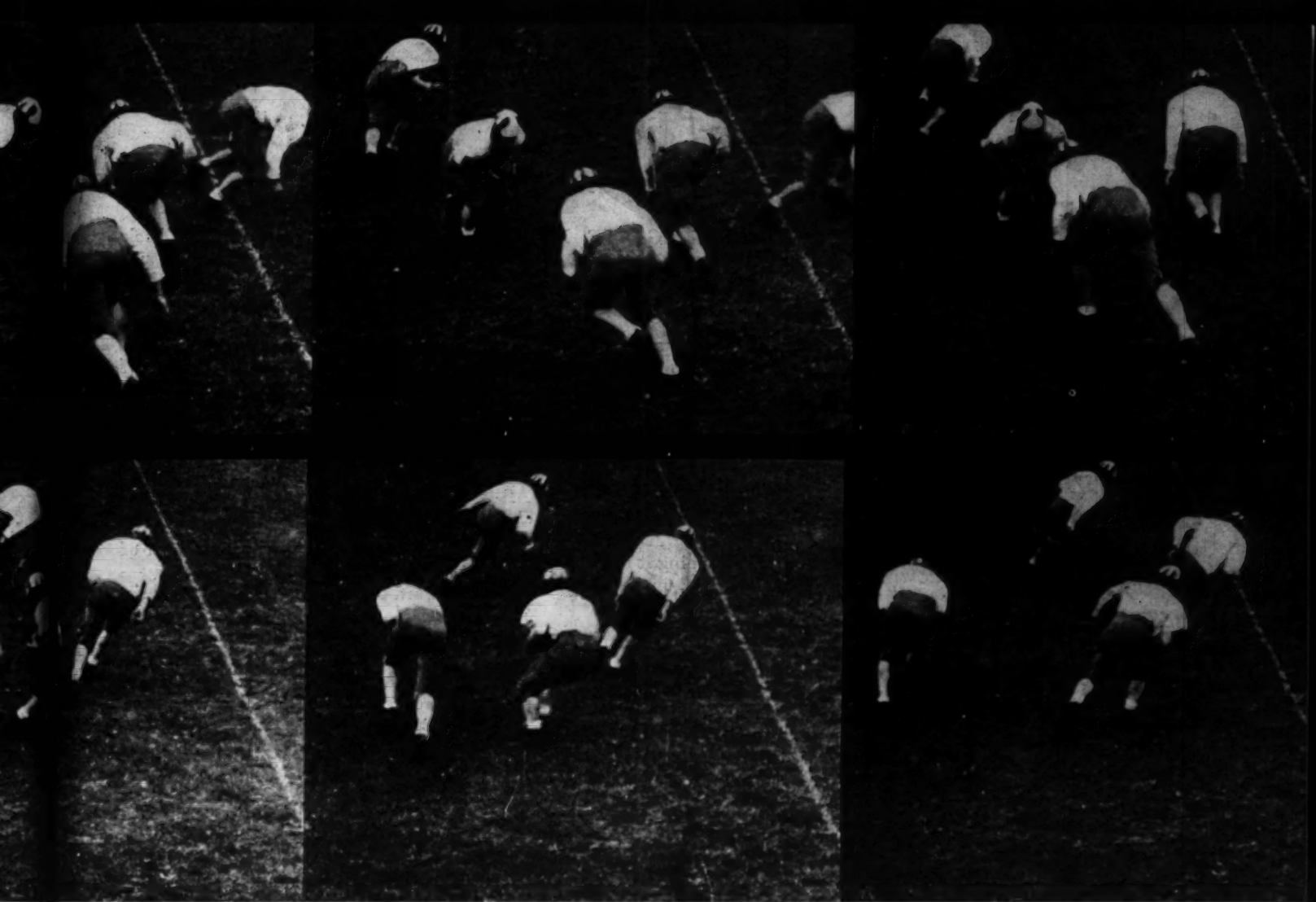
A quarterback should be thoroughly drilled in the principles of his own offensive system. He should know as definitely as it is possible just what his teammates can and cannot do. He should also study carefully the personnel of the opponents both before and during the game. He should always have a definite opinion in his mind as to the comparative strength of his own running attack and the opponents' defense for it, his passing strength in comparison with their pass defense, and the effectiveness of his punting game against theirs, and how effectively their punting game will work against his team. This opinion may change considerably during a game. An understanding of the comparative strength of these three elements of offense will guide him in making his selection of the offensive weapon with which to try to accomplish his purpose.

By Wallace Wade

For purposes of generalship we consider that we are on the defensive, that is we are trying to prevent a score on us, when we have the ball back of our own 35-yard line. When we have the ball beyond our own 35-yard line we consider that we are in a position to try to score, or are on the offensive. We also consider that we are on the offensive when the opponents have the ball behind their own 35-yard line, and that we are on the defensive when the opponents have the ball beyond their own 35-yard line.

Punting strategy

When we are in the defensive territory our purpose should be to try to get into offensive territory, that is the surest way to keep from being scored on. A team may do that by punting, passing, or running. If the punting game promises a fair chance of advancing one into offensive territory it should be the first choice. If the punt is to be the method used, judgment should be exercised in calling



MOVING PICTURES BY OWEN REED

on the punt at the most opportune time. A punt may be made more effective sometimes by threatening with a pass or run so as to keep the opponents in positions to prevent their playing most effectively against a punt. It is not always best for your punting game to punt on first down when in defensive territory. If you cannot hope to get out of defensive territory by use of the punt then you should try to get out by using the pass or run, whichever promises to be most effective for your team against the team you are playing.

Offensive territory divided

We divide the offensive territory into two divisions. Between our own 35-yard line and the opponent's 35-yard line, or the line beyond which we will not punt, is the territory in which we will try to use long gain plays. Realizing that if these long gain plays fail we may punt and get a chance to try another series of long gain plays after the opponents have kicked back to us. Experience has taught us that it is very difficult to score by a drive of more than 35 yards unless at least one long gain play is used.

"First down" plays

After one gets beyond kicking territory it becomes very much worth while, for the first time, to make first downs. Because if the ball is surrendered to the opponents, they can immediately kick out and you lose at least the distance of a punt. Therefore, in this territory, beyond the opponent's 35-yard line, one should use plays which are most likely to gain enough ground to insure retaining possession of the ball.

Classification of plays

All plays fall into certain classifications, the features of which are generally known. However, as said before, a line buck that is designed to gain two yards may gain thirty-two if aimed at the opponents' weakness. A quarterback will eventually discover the real weakness of the opponents' defense, and it may develop that the weakness he discovers will not be what he expected to find from his study of the scouting reports. But, in general, plays have certain day-in and day-out features and values, allowing for classification:

Line bucks and slants—These are almost always good for a small gain of one to three yards, and when a loss does ensue it is usually equally small.

Spinners, cut-backs and in-and-out runs—There is a probability of a larger loss on this type of play than on line bucks and slants, but if the play clicks the gain is likely to be in excess of four yards.

End runs, reverses, double-pass plays, lateral-pass plays—These are more of a gamble than the previous two. The reward is a good gain, the risk a bad loss. Each coach and quarterback will know to what extent his team has the ability to make his plays of this type click a reasonable number of times.

Forward-pass plays—On forward passes the probability of losing the ball is greater than on any other type of play, except, of course, kicks. Again, only the coach himself, who knows how well his team can execute its passing attack, is in a position to determine the assets and the liabilities of forward passes for his particular team.

Kicks—On punts and other kicks it is almost certain that the ball will be lost to the opponents, but the gain in yardage is usually considerable.

ACE BANDAGES

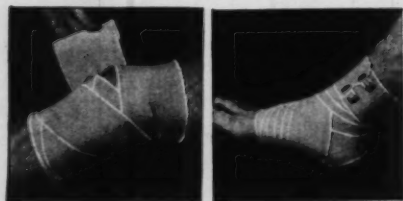
ELASTIC WITHOUT RUBBER

MINIMIZE injuries and you get maximum results from your squad. Ace Bandages keep your injuries down.

Successful coaches insist on an adequate supply of Ace Bandages.

TWO NEW BANDAGING TECHNIQUES

1. for Knees 2. for Ankles



These new bandage methods are described in the new folder, "4 Football Aces" which tells new ways of protecting ankles and knees where men are hit hardest in lateral passes, runs and double reverses. Send for your copy, if you have not already received one. You may also want a copy of the "Ace Athletic Manual" which describes the various uses of the Ace Bandage for the Prevention and Treatment of Athletic Injuries.

Sold Through Dealers

Please send free copy

- ☐ ACE ATHLETIC MANUAL
☐ FOUR FOOTBALL ACES

SC10

Name.....

Address.....

Institution.....

Dealer.....

BECTON, DICKINSON & CO., Rutherford, N. J.

New books on the sportshelf

Football album

INTERCOLLEGIATE FOOTBALL 1869-1934. Edited by Christy Walsh. 478 pp. Illustrated. Double-day, Doran & Co., New York, \$7.50.

THERE never was a football book like this. It is a grand round-up of all that college football has been to date, on the glory side, of course, because the book's editor, Mr. Christy Walsh, is the country's No. 1 sports glorifier, and the copyright owner of the one and only All-America Board of Football (Reg. U.S. Pat. Office). When Mr. Christy Walsh goes in for anything it is in a big way, and this book is, in all its imposing thickness and weight, up to every Walsh tradition. It is made up in three types of bindings: the regular Buckram binding which sells for \$7.50; the Fabrikoid Deluxe which sells for \$12.50; and the Pigskin binding which sells for \$35. Take your choice.

This old book browser's first impression on looking through the Walsh tome was a mixture of exclamation, interrogation and surprise: How in the name of a pair of goal posts did the Chairman of the All-America Board of Football (Reg. U.S. Pat. Office) manage to get together such a complete collection of data, dope and statistics? The hundreds of pictures of all-America selections dating from Walter Camp's earliest days, the column after column of team scores over the years, and the names and dates of all college football players in a hundred odd universities and colleges—the clerical and editing task must have been tremendous. The files of the Spalding Football Guide, college year books, and the writings and correspondence of such giants of football memory as John W. Heisman and the late Parke Davis, were utilized in assembling the material. With only two or three exceptions, there are living members of every college football team since 1869, when the first intercollegiate game was played between Rutgers and Princeton. College graduate managers and athletic directors and publicity directors pitched in and helped dig for the material. In addition to the statistics and the photographs there are a great many interesting articles on the romance of the game, its heroes, and its "big moments."

Inserted in the back of the book is a series of coupons dated 1935, 1936, 1937 and 1938, by which the purchaser of the book can subscribe to the an-

nual supplement service. The 1935 supplement is free.

It would seem that all the book needs to guarantee its financial success is a sale to every living football player whose name appears in it.

Not every college, of course, is represented by a full section. All the well known national and sectional football-playing institutions are there with complete lists of letter men, photographs of the present head coaches, of the all-America players and the undefeated teams—some 120 colleges and universities in all.


The contributing editors lined up by Mr. Walsh form an imposing team of the outstanding coaches of the day—Howard Jones, Gilmour Dobie, Glenn Warner, Andy Kerr, Lou Little, Tiny Thornhill, Dan McGugin, Dick Hanley, Eddie Casey, Wallace Wade, Harry Kipke, Jock Sutherland, Bill Ingram, Bill Alexander, Fritz Crisler, Jimmy Phelan, G. Ott Romney and Jim Crowley.

1934 Guides and Rule Books

FOR the opening of school in September the American Sports Publishing Co. had ready four volumes in the Spalding Athletic Library series of annuals: The Football Guide and N.C.A.A. Rules for 1934 (35 cents); the Soccer Guide and Rules for the season 1934-35 (25 cents); the Field Hockey and Lacrosse Guide for Women and Girls, with detachable rule book, 1934 (25 cents); and the Soccer, Speedball and Field Ball Guide for Women and Girls, with rules for 1934-35 (25 cents).

Both the N.C.A.A. Football and Soccer guides contain interscholastic sections. The Football Guide is so well known as to require no comment here. In the Soccer Guide there are pictures of some of the leading schoolboy teams and about ten pages given over to scholastic records and notes. The introduction to the scholastic section remarks the growth of soccer in the high schools, and the improvement in the skill of young school players:

"While a kick-and-rush style of play is characteristic of the average schoolboy game, there is a noticeable increase in the ability to control the ball and more attention is being paid to the fundamentals of the game, as shown in the Spalding Handbook on 'How to Play Soccer,' which was written for the express benefit of the younger element. However, there is not enough attention paid to teaching the use of both feet. It is a pity that this requirement is not stressed more fully, as in consequence the boys are handicapped in their ability to play the game properly and derive the maxi-



BAY

PRODUCTS THAT SHOULD BE IN EVERY TRAINING ROOM

- 1. ORTHALETIC PLASTER**—the adhesive plaster with the special heavy backing that has equal strength both ways, gives extra support, reduces shock and does not constrict. Supplied on 5-yd. spools 12-in. wide and read-cut to the following widths: $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$ and 3 inches. May be obtained in a wall rack for training quarters or a hand rack for trainer's bag.
- 2. BAY'S READI-BANDAGES**—handy readi-dressings supplied one inch wide and six inches wide for immediate application to small cuts or bruises.
- 3. BAYHESIVE**—the improved zinc oxide adhesive plaster that maintains maximum tenacity at body temperature.
- 4. BAYBANDAGE**—the non-ravel gauze bandage that does not shed end threads. Dressings are permanently neat. Supplied in all the usual widths and lengths.
- 5. BAY'S READI-PADS**—gauze dressings cut and folded ready for use, sealed in glassine envelopes, steam sterilized after sealing.

All Bay products can be furnished by your regular medical supply dealer.

THE BAY COMPANY
BRIDGEPORT, CONNECTICUT
A DIVISION OF
PARKE, DAVIS & CO.

SURGICAL **BAY'S** DRESSINGS

THE BAY COMPANY, Bridgeport, Conn.

9C10

Gentlemen: Please send me samples of BAY products.

Name _____

Address _____

Institution _____



HOW TO GET QUICK RELIEF WHEN PAIN 'TIES KNOTS' IN YOUR MUSCLES

That "knot of pain" is a real knot—muscles are tight with congestion that needs to be soothed away if you want real relief.

And thousands will tell you the way to soothe that knot away is to rub, rub, rub with good old Absorbine Jr.

You can feel its grateful, warming glow spread down into the tissues as your hand moves back and forth over that spot of pain. You can feel the pleasant circulation of fresh clean blood flowing through the tissues to carry congestion away.

That's why Absorbine Jr. has been the choice of famous athletes, coaches and trainers for forty years. Men who *have* to get quick relief will tell you that nothing soothes away throbbing pain, soreness and congestion like Absorbine Jr.

All druggists can supply you with Absorbine Jr.—\$1.25 a bottle. Economical to use . . . only a few drops are needed per application. For free sample write W. F. Young, Inc., Springfield, Massachusetts.

ABSORBINE JR.

Relieves sore muscles, muscular aches, bruises, sprains, sleeplessness, Athlete's Foot

mum pleasure out of it. However, it is when they go out for the team in college that this lack of ability to trap, kick or head the ball with the degree of skill requisite to make and hold their places is most pronounced.

"It is very easy for young boys to learn how to kick and trap properly with either foot and the older they become the more difficult it is for them to acquire the ability.

"The game continues to be played under the intercollegiate rules, with four quarters instead of two halves, with a one-quarter interval between the first and second and the third and fourth quarters, and the usual half-time interval between the second and third quarters.

"The offside rule remains the same, i.e., two defenders; the method of taking the throw-in is changed slightly, i.e., some part of both feet on the ground on or behind the line at the moment of throwing in, and the ball coming over the head.

"In the taking of a penalty kick the goalkeeper must stand on the line until the ball is kicked, and all of the players, with the exception of the player taking the kick, must stand 10 yards away from the ball, as in any other free kick.

"Unlimited substitution is permitted so long as arrangements are made therefor by the responsible authorities before the game is started. Coaches should see that the referees for their interscholastic games are intelligently strict, and should belong to some recognized Referees Association."

The two women's volumes, containing the rules of field hockey, lacrosse, soccer, speedball and field ball, are veritable manuals of these games as well as rule books. The lady editors, sitting as sub-committees of the American Physical Education Association, are utterly indifferent to the precedent and tradition in editing the Spalding guides set by the men over the past fifty years. The ladies disdain the custom of filling up the guides with pictures and records of teams, preferring instead to use the good white paper for articles and advice on how to play the game, how to referee, and for bibliographies on the various sports. Some of the articles in the Field Hockey and Lacrosse Guide are: "Goalkeeping Technique," "The Forward Line Problem," "Some Suggestions for Teaching Beginners" and "Defense Play." The other volume (soccer, speedball and field ball) is even more generous with its assortment of diagrams of position play, play situations and photographs illustrating technique. There are bibliographies, glossaries of terms and articles, including "The Teaching of Soccer," "The Duties of Defense Players," and a description of four soccer skill tests.

Play situation books

FOOTBALL PLAY SITUATIONS.

Compiled by High L. Ray. 72 pp. National Federation of State High School Athletic Associations, Chicago. 30 cents.

BASKETBALL PLAY SITUATIONS

Edited by H. L. Ray and H. V. Porter. 64 pp. National Federation of State High School Athletic Associations, Chicago. One dollar.

THESE little annuals keep right on top of the game. They are the experts' workbooks, and as such are the best collection of problems and questions and answers available on football and basketball. *Football Play Situations* is "a textbook for the study of rules and game procedure based on 1934 official interscholastic football rules," as the sub-title says. In addition to a statement of several hundred problems and their solutions it contains a recommended procedure for officials with diagrams showing the positions they should take on free kicks, plays near the goal line and the try-for-point. Two sample problems from the book and their solutions; the first is problem No. 1 in the book and the second is problem No. 273, the last in the book:

1 PLAY—A team informs the Referee that it will have two Captains during the game, one for offense and one for defense.

Ruling—Allowable, but one of these must be designated as the sole representative of his team in all communications with officials. 1-1-1.

273 PLAY—A Captain asks the Field Judge how much time remains for play during a period.

Ruling—Upon request he should state the approximate time remaining unless the privilege is being abused. He should notify the Captain through the Referee of the time remaining for play not more than 8 or less than 4 minutes before the termination of each half. 10-5-5.

The problems in *Basketball Play Situations* are preceded by articles on "Best Practices in Officiating" and "Recommendations to Players, Scorers and Timers." This reader was particularly interested in the advice to players, which is brief (seven items) but pertinent, such as: "After a goal is made if you are nearest to the ball hand or pass it to the Official in a sportsmanlike manner. Kicking the ball is not considered good playing ethics."

Sample questions and answers from *Basketball Play Situations*:

PLAY—(1) Team A advances the ball over the center line and makes a pass which strikes an opponent. The ball is then recovered by Team A and passed into their back court without having been in Team B's possession. Team A is the first to touch the ball in their back court.

Ruling—Violation. Team B's ball at out of bounds spot. (8-8).

PLAY—The Official blows his whistle for a held ball and then discovers that the ball is held by two players of team A.

Ruling—The ball is awarded to team A out of bounds on the side nearest the spot where play ceased. (7-3).

J. L.

THE NATIONAL HIGH SCHOOL FRONT

From the office of the National Federation of State High School Athletic Associations

An Appreciation

THE editor of this column desires to express a very cordial appreciation to the secretaries of the various state high school athletic associations throughout the United States for their responses to his questionnaire designed to elicit the information appearing in the table of athletic eligibility rules published in the September issue of *Scholastic Coach*. As you have observed if you have scanned that table we obtained responses from every state association in the country. We believe it is the first time in a long and more or less checkered career in dealing with questionnaires that we have ever known of a 100 percent response.

It is our opinion that these secretaries could not have been very severely censured if they had failed to respond. Investigators continue to submit these questionnaires on every conceivable subject for very slight reason or for no reason. They have become such a nuisance that it is the practice of many school men to consign them at once to the waste basket.

The table is by no means perfect and we doubt if a perfect report on eligibility rules could be subjected to this particular form of report. There are so many questions that cannot be answered briefly but demand explanation and illustration. As far as possible, such explanations were reduced to a word or a figure and inserted anyway. This undoubtedly in many instances may somewhat distort or perhaps, in a few instances, misrepresent the exact situation.

On the whole, however, we think the table will be of appreciable use throughout the country. It is to be hoped, of course, that it will serve as a basis for the modification of eligibility rules in many states and if that outcome results from its publication then its accuracy will be short-lived.

We note, by the way, that in New York the age limit of competition has been reduced to 19 years. Well, why not? The average age at which high school boys normally complete their course is probably not in excess of 18½ years. If it is desired to restrict interscholastic competition to normal high school boys then that is about the age at which they should drop out of this competition. If such an age limit comes into general acceptance it will still further discourage the employment in our athletic competition of the mature man pitted against high school boys.

Moreover, here is a point which is frequently overlooked by those sympathetic coaches who always speak of the unfortunate retarded boy with tears in their voices. Every time one of these mature

over-age boys is used in athletic competition it excludes some normal boy who would get just as much value out of the competition and who is entitled to a chance. Keep in mind that the 19-year-old boy has already had his chance at least for four years of sports in the average high school. He will have absorbed just about all of the "character-development" there is in it for him. Let him retire and give the normal boys an opportunity to participate.

Federation Football Rules

It is a matter of very great satisfaction to the Federation authorities to be able to announce that eight states have officially adopted the interscholastic football rules for 1934 and are now conducting their interscholastic games under those rules. These states are Wisconsin, Minnesota, Iowa, Illinois, Alabama, Kansas, North Dakota and South Dakota.

This year the Federation had 10,100 rule books printed. In spite of that fact, the entire edition was exhausted by the middle of September and quite an appreciable number of unfilled orders were on the secretary's desk. Wherever they have been used these rules have given excellent satisfaction and they have won additional popularity this year through the modification of the forward pass rule. We are informed, but not officially, that this modification of the forward pass rule has been adopted in one or two other states that have not completely adopted the interscholastic rules.

An Alibi

We think it is a little unfortunate that Mr. Okeson, chairman of the National Collegiate A. A. football rules committee, should have seen fit to resort to a half truth as an alibi for the refusal to grant active representation on the N.C.A.A. committee to the high school organization. In an editorial in the 1934 Intercollegiate Football Guide, Mr. Okeson says: "The High School Federation, however, feels that its representatives should be regular members of the Committee and have their expenses paid by the N.C.A.A."

This statement does not tell the whole truth. Under the present set-up, royalties on the football rules books are paid into the N.C.A.A. treasury and the N.C.A.A. in turn pays the expenses of the members of the football rules committee. But Mr. Okeson well knows that it was the National Federation proposal to organize an entirely different set-up. What we wanted was an organization similar to that which now prevails in the basketball committee. Here the National Federation has a definite number of active members of the

committee and a perfectly definite percentage of the royalties on the rule books is assigned to the treasury of the National Federation upon which the National Federation pays the expenses of its own delegates.

It is a contention of the National Federation that the high schools of the country are now paying more than half the expenses of the National Collegiate committee. Every high school coach or player who buys the Intercollegiate Guide pays a royalty which goes into the treasury of the N.C.A.A. No one can say definitely just what proportion of the N.C.A.A. rule books have been purchased in the past by high school people but we think we are on conservative ground when we say that more than 50 percent of these books have been bought by high school men and boys. In Illinois, for instance, we know that we have only about forty colleges that are playing football whereas we have approximately ten times as many high schools playing football. Mr. Okeson therefore would have been very much nearer the mark if he had admitted that throughout the past the college men on this committee have had more than half of their expenses paid by the high schools of the country.

Chicago Regional Conference

There will be a regional conference of high school men interested in athletics in Chicago on Saturday, October 27. Any high school man will be welcome at this meeting and is invited to participate in its deliberations. At this meeting there will be a thorough discussion of this whole matter of the preparation and the publication of playing rules by the National Federation.

Another matter which will receive consideration at this meeting will be the promotion of better officiating in our high school games. This matter of securing competent officials is recognized as one of the outstanding problems confronting high school men today. There are in any state a considerable number of very high quality officials. In general these men can command rather superior fees and are only available to those schools that have generous support and rather liberal funds for financing their athletic budget. Those schools which are more limited in means are compelled to get along with less excellent service.

The meeting will be held at the Palmer House, Chicago, and will convene at 9:30 a.m. Mr. Howard G. Busch of the Palmer House is giving personal attention to our requirements and those desiring reservations for our meeting should address him personally in care of the Palmer House.

C. W. WHITTEN,
Secretary, N.F.S.H.S.A.A.



WHEN you order school gym suits and athletic costumes insist on Argentine cloth. You'll find it will give more satisfactory service and stand up under the continued

launderings of the long school year. Sun-fast, tub-fast, perspiration proof - this remarkable fabric is used by the best makers and sold by dealers who aim to give the best for the least. For sample swatch and complete color card write to

MAHLER TEXTILES, INC.
Selling Agents
59 White Street New York City



The Physiology of Athletics

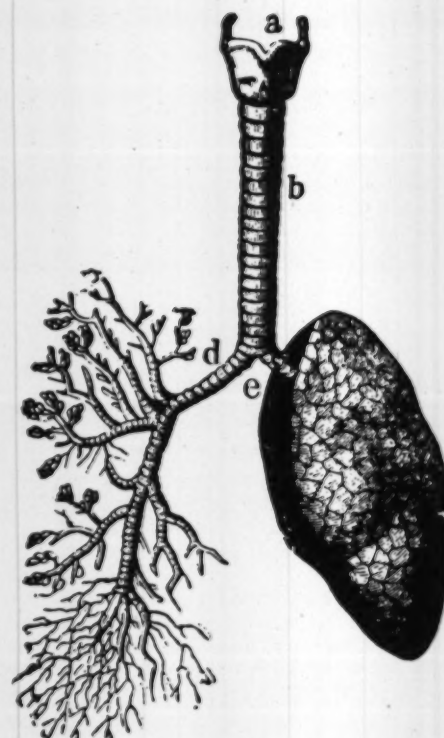
Respiration

By Peter V. Karpovich, M. D.

It is common knowledge that every increase in activity is accompanied by an augmented respiration. Just as a blacksmith has to work his bellows harder when a hotter flame is needed, so we have to breathe more deeply and faster when more oxygen is required to carry on a greater rate of oxidation in the active tissues. But here the analogy ends. By pumping the bellows harder one can always make the fire on the hearth bigger, but no amount of violent respiration will make the flame of life more intense. It is a fallacy to advocate deep breathing as a means of increasing oxygen consumption by the body cells. It is true that the total oxygen used during a forced respiration is greater than during a quiet breathing, but this excess of oxygen is spent on extra work done by the respiratory muscles. The other organs retain their usual rate of oxygen consumption. The deep breathing or the "lung gymnastics" has its merits, but they are mostly concerned with the changes produced in the circulation of the blood and lymph. During a deep breathing the blood and lymph circulation is increased. A massaging effect produced by the diaphragm on the abdominal contents during an inspiration is also of some benefit.

Formerly physical directors and physicians recommended methodical "lung gymnastics," although there was not a scientific evidence to support their prescription. Many people still believe in the magic power of breathing exercises. Yet those who have lung diseases and are interested especially in this kind of gymnastics should be the last to resort to its use. People with tuberculosis of the lungs may do much harm by practicing vigorous lung gymnastics, especially when it is combined with a brisk slapping on the chest in order to "inflate some idle alveoli." A rupture of the lung may be a reward for such heroic practice.

A person with a flat chest is apt to think that his lungs are too small. Before jumping to such a conclusion one should measure his lung capacity (vital capacity) by blowing air into a spirometer. An average person has a vital capacity of about 3500 cc. An athlete may have 5000 cc. or more. If one wishes to develop his lungs he



The lungs and air-passages seen from the front. On the left of the figure the pulmonary tissue has been dissected away to show the ramifications of the bronchial tubes. a, larynx; b, trachea; d, right bronchus. The left bronchus is seen entering the root of its lung.

(From "The Human Body" by H. N. Martin, Henry Holt & Co., New York, 1910)

need not practice artificial deep breathing. The development of the lungs depends on the general development of the body. Even if the vital capacity is, say, 3000 cc. there is no reason to think that this is inadequate for the corresponding body conditions. A small lung capacity indicates poor development of the organism in general and this should be attacked and not the lungs alone. An improvement in body conditions will be followed by an increase in the lung capacity. The best method for developing the lungs is to participate in activities requiring energetic running.

The writer had occasion to test the vital capacities of the best athletes in Latvia during a state competition in boxing, wrestling and heavy weightlifting. It was interesting to note that the boxers had the greatest lung capacity, although some of the wrestlers and weight-lifters had a formidable chest girth.

The lungs remind us roughly of an inverted tree in which the trunk, the branches and even the leaves are hol-

low. The trunk corresponds to the trachea, the branches, to the smaller respiratory passages, and the leaves, to the air sacs or alveoli. If we spread the alveoli, they will cover a space of about 100 sq. meters. This large surface area, combined with the fact that it takes only one-twentieth of a second for the blood to become saturated with oxygen, explains why breathing is efficient in spite of a comparatively low rate.

The lungs are placed in a semi-rigid chest cavity with a muscular membrane, the diaphragm, separating them from the abdomen. On inspiration the ribs are elevated and rotated outwards, the diaphragm contracts and goes downward. The combined effect is an increase in the size of the chest cavity which produces a suction effect and the air from outside enters the lungs. During the expiration the ribs come down, the diaphragm goes up and the chest cavity becomes smaller, causing a movement of the air from the lungs.

During a forced breathing the expansion and contraction of the chest are greater on account of the action of some additional muscles. An athlete after vigorous exercise will often stoop, resting his hands on his knees. In doing so he immobilizes his arms, and the pectoral muscles therefore help in respiration. In a violent expiration which constitutes coughing or sneezing one can easily feel a sudden contraction of the abdominal muscles. If the person is lying on his back, the legs are suddenly drawn toward the stomach. Particularly it is noticeable in babies.

This varies with the size of the subject and the kind of activity in which the subject is engaged. An average adult while at rest will inhale between 350 cc. and 500 cc., 12 to 15 times per minute. Some people have a very low respiratory rate. There is a case on record of 3 to 5 respirations per minute. The subject was a young healthy girl. She has been studied extensively in the Carnegie Nutrition Laboratory in Boston. It was found that her respirations were about 1500 cc. each, much deeper than ordinary so that the total amount per minute remained the same as in the other people.

The quantity of the air needed increases with every increase in muscular effort. Y. Henderson and H. Haggard found that in a healthy man, weighing 150 pounds, the amount of air breathed per minute varied as follows: Resting in bed—6 liters, sitting

[Concluded on page 40]

QUICK ENERGY

plus

LASTING ENERGY



"Ripe bananas as an energy source have a double value for athletes. Some of the sugar gets into the blood stream at once, supplying the 'quick energy' that is so important. The remainder is taken up by the system more slowly, extending over a period of several hours. This means extra endurance—for hard practice or a hard-fought game."

RE Hawley
Coach Northwestern University
Chicago, Illinois

This double-value energy supply makes bananas an excellent food for athletes in training—AND you can recommend them freely, as they are an economical and healthful food for the whole family. Send coupon for free complete booklet.



UNITED FRUIT COMPANY
Educational Department
1 Federal Street, Boston, Mass.

SC 10-34

I want your interesting new booklet, "How to Make that Team."

Name.....

Position.....

School.....

City..... State.....

PUT BANANAS ON YOUR DIET LISTS



RIDDELL Athletic Shoes

are the outgrowth of eighteen years of coaching, and have been adopted as standard equipment in leading universities, colleges and high schools since 1922. There can be no stronger recommendation of their quality.

Basket-ball Shoes



Style 55—Blue back Kangaroo upper. Welt construction. Oak leather insole and counter with molded rubber outsole. This shoe may be resoled, as the life of the upper and insole is much longer than that of the rubber outsole.

Style 56—Athletic tanned elk upper; sole same as on Style 55.

Track Shoes

with interchangeable spikes

Style S—A very fine model. A light but very durable glove fitting Yellow Back Kangaroo sprint shoe. Hand turned.

Style N—Same shoe as Style S in Blue Back Kangaroo.

Style K—Blue Back Kangaroo field or jumping shoe. Hand turned. Has counter and two spikes in heel.

Style KX—Blue Back Kangaroo. Cross country shoe. Hand turned. $\frac{3}{8}$ " spikes in tap. Cushion heel.

Style T—A good durable track shoe of little welt construction.

Style 75—A very strong field shoe of welt construction.

Baseball Shoes

Made from Genuine Australian Kangaroo and equipped with a specially made spring steel spike

Style SB—A hand-turned feather weight Yellow Back Kangaroo shoe of the finest quality.

Style NB—Best welt baseball shoe in the line. Made of Blue Back Kangaroo.

Style KB—A value hard to beat. Welt shoe of Blue Back Kangaroo.

Style 41—A good value in baseball shoe. Lock stitched. McKay construction.

All numbers carried in stock

JOHN T. RIDDELL, INC.

1259 NORTH WOOD STREET
CHICAGO, ILLINOIS

Scholarship Among High School Athletes

[Continued from page 12]

at once. These blanks are put in circulation when practice starts so when the season opens the squad is scholastically, as well as physically, ready.

The coach warns the players when practice starts that if a name appears on a teacher's report blank for two consecutive weeks the player whose name so appears will be suspended from the squad until further notice. The coach also tells the squad that if a name appears on two blanks the same week that player must stop practice until satisfactory marks are attained. Several players have been dropped temporarily under this rule.

The eligibility forms which carry the names of players who are failing are posted on the dressing room bulletin board and a boy is permitted to remove his name from a form only when he has a passing grade in the subject. A surprising amount of interest, even among those players who consider passing marks a necessary evil accompanying athletic participation, has been shown in getting names removed from the bulletin board.

The second device is an old one but it works just as successfully in stimulating scholarship among athletes as it does for other things. It is class competition. At the close of each grade card period averages are compiled, usually by a committee from the squad, for each player and these averages, arranged by classes, are posted on the bulletin board. Much more interest is shown in these averages than one would ordinarily expect. In a way this posting of average grades for each player is a follow-up on the eligibility blank. It gives recognition and credit to the athlete who not only keeps his work up and his name off the forms, but does a higher quality of work than is required for eligibility. Seldom are senior averages excelled by those of

any other class. It would seem that the longer a boy works under the system, the better his scholarship becomes.

The fact that senior athletes usually rank highest when averages are figured has led to the third feature of the system, that of using senior influence on under-classmen. When a player's name appears on a teacher's eligibility blank, seniors, designated by the coach, have a talk with the player. They try to discover the source of the boy's difficulty with that particular subject. They give advice, based on their own experience, and offer assistance in the form of tutoring. Sometimes they accompany the unfortunate one to a conference with his teacher. Seldom are the offers of advice and help refused, but occasionally pride prevents the acceptance of even well-meant advice and assistance. Even then, however, the school work usually comes up as expected.

The seniors are made to feel that they are rendering a real service to their school and that their help has proved invaluable both to under-classmen players and to the eligibility program. The benefits which come to the seniors themselves in helping to carry out a program of this kind should not be overlooked when considering its value.

Admitted that this plan helps athletes to become better scholars, but how does it help scholars to become better athletes? In this way: a better type of boy is attracted to the interscholastic program by the high standards observed. Like attracts like. The representative interscholastic teams become truly representative of the school, a cross-section of the student body that the school may take pride in without compromise.

Wisconsin Coaches Organize

Another state high school coaches' association has been formed with the organization of the Wisconsin coaches. Late last spring Guy Lowman of the University of Wisconsin invited a group of high school coaches to meet with him and discuss the possibilities of forming an association which might be of interest and service to the high school coaches throughout the state. As an upshot of this conference it was decided to form a regular group and seek to interest all state high school coaches in the program. The six-point program which the association agreed to adopt as its purposes and objectives follows:

1. To foster and encourage a better understanding among coaches of the various sections of the state.

2. To place coaching on a more educational basis and more in line with the policies of all educational administration.
3. To develop and promote higher social and ethical practices on the field or court.
4. To provide an opportunity to bring before the group many valuable studies and presentations on methods of technique and phases of coaching which would be of great benefit to the group as a whole.
5. To cooperate in every way possible with the Wisconsin Interscholastic Athletic Association in the promotion of a broad and wholesome high school athletic program.
6. To establish and maintain the highest possible standards of sportsmanship.



Quick Energy Wins!

A tired athlete is of little value to his team or coach. . . . Exhausted muscles can't supply that drive that wins. . . . Many college trainers and coaches are now using some form of "energizer" for their players in the more strenuous sports. Physicians for many years have used dextrose as a source of quick fuel and energy. In the fall of 1933, Eskay's Dextrettes, a convenient dextrose tablet, was first introduced for use in athletics. Dextrettes supply muscle fuel, build reserve energy and relieve fatigue during and after

athletic contests. Here is what some coaches and trainers write us:

"From personal trial I found the tablets eliminated 'that tired feeling.'"

Team Trainer.

"I feel that the tablets picked the men up a good deal."

Athletic Director.

"Our teams have been well pleased with the Dextrettes and I would not hesitate to recommend them to any coach or trainer."

Head Trainer.

"I am absolutely sold on Dextrettes."

Track Coach.

ESKAY'S DEXTRETTES

supply real energy immediately and
with no undesirable after effects

SMITH, KLINE & FRENCH LABORATORIES • PHILADELPHIA, PA.



See Next Page for Free Offer

ESKAY'S DEXTRETTES

A source of quick energy for those engaged
in all forms of athletic and muscular activity

Scientific investigations into the causes of physical exhaustion have shown that fatigue has a direct relationship to the amount of sugar in the blood. To offset fatigue, the carbohydrates (sugars) burned up during violent physical exertion must be replaced.

Champion Crew 1924

As early as 1924 Henderson and Haggard, in studies of a Yale crew that won the Olympic championship, showed that carbohydrates are the best fuel of muscle. Other investigators have reached the same conclusion.

Carbohydrate food (sugars, starches, etc.) is broken down in the course of digestion. One of its ultimate products is dextrose, which is the sugar found in the blood. It is this sugar which supplies energy directly to the body. In other words, the energy in carbohydrates is the dextrose which they eventually become. Because dextrose is the ultimate carbohydrate, it supplies a quick fuel without digestion and with no loss of energy.

DEXTRETTES, THE IDEAL ENERGIZER

In interviews with the coaches and trainers of more than thirty leading Eastern colleges we found that the ideal source of energy for use in athletics should possess the following qualities:

1. Efficiency in building reserve energy and in relieving fatigue.
2. Rapidity of action.
3. Convenience.
4. Absence of after effects.

In Eskay's Dextrettes we believe we are presenting the one product which meets all of these requirements.

1. Efficiency in Relieving Fatigue

Several scientific investigations have been made on the relation of fatigue to blood sugar. Dr. Gordon and his associates studied the physical condition of the contestants in several Boston Marathon Runs and in the Coast-to-Coast Marathon. They reached this conclusion: "It seems, therefore, that the pictures of exhaustion, weakness, shock and other symptoms of hypoglycemia (lack of sugar in the blood) following prolonged effort may be prevented by the timely and adequate ingestion of carbohydrates."

Dextrose is the ideal carbohydrate for this purpose. Used as a part of the training diet and eaten before a contest Eskay's Dextrettes build up the energy reserve. During a contest they have a directly energizing effect. Taken after a contest they minimize the consequent exhaustion with its strain on the nervous system.

In many cases of nervous exhaustion it has been found that the blood sugar content is low. By raising the blood sugar Dextrettes are beneficial in relieving the nervous exhaustion which is often as great a problem in an athletic contest as is physical exhaustion.

2. Rapidity of Action

Dextrose requires neither digestion nor chemical change for assimilation. From

the time a Dextrette enters the mouth its action in supplying energy begins.

3. Convenience

Eskay's Dextrettes are a convenient dextrose tablet and can be administered right on the playing field. They contain peppermint flavoring and are extremely pleasant to the taste. They are chewed and eaten like candy.

4. Absence of After Effect

Dextrettes contain no "dope" or depressants of any kind and are not habit-forming. Each tablet contains approximately 30 grains of dextrose and $\frac{1}{2}$ grain of magnesium oxide. They are sugar in its purest form, beneficial, harmless and followed by no subsequent "let down." They are a valuable food, even apart from their energizing effect.

Dextrettes are not laxative. The equivalent of one teaspoonful of milk of magnesia to each six tablets was added to offset the tendency to constipation caused by all sugars, and to provide a pleasant antacid effect.

There is no danger of overdosing. Dextrettes can be taken in whatever quantity is necessary to relieve fatigue without upsetting or nauseating.

A PROVEN PRODUCT

Dextrose has been used by physicians as a source of quick fuel and energy for many years.

Dextrettes have been used by the trainers and team physicians of many leading Eastern colleges with very favorable results. They have proved of value in football, basket ball, baseball, track, tennis, swimming, wrestling, etc. The greater the amount of physical exertion required, the greater is the value of Dextrettes as a source of quick energy. The advantages of Dextrettes are apparent as compared to such stimulants as candy, orange juice, sweetened tea and lump sugar, which load the stomach and must be digested, with a consequent loss of energy.

Used in Colleges

WRITE TODAY FOR A FREE SUPPLY

SMITH, KLINE & FRENCH LABORATORIES
105-115 N. Fifth Street, Philadelphia, Pa.

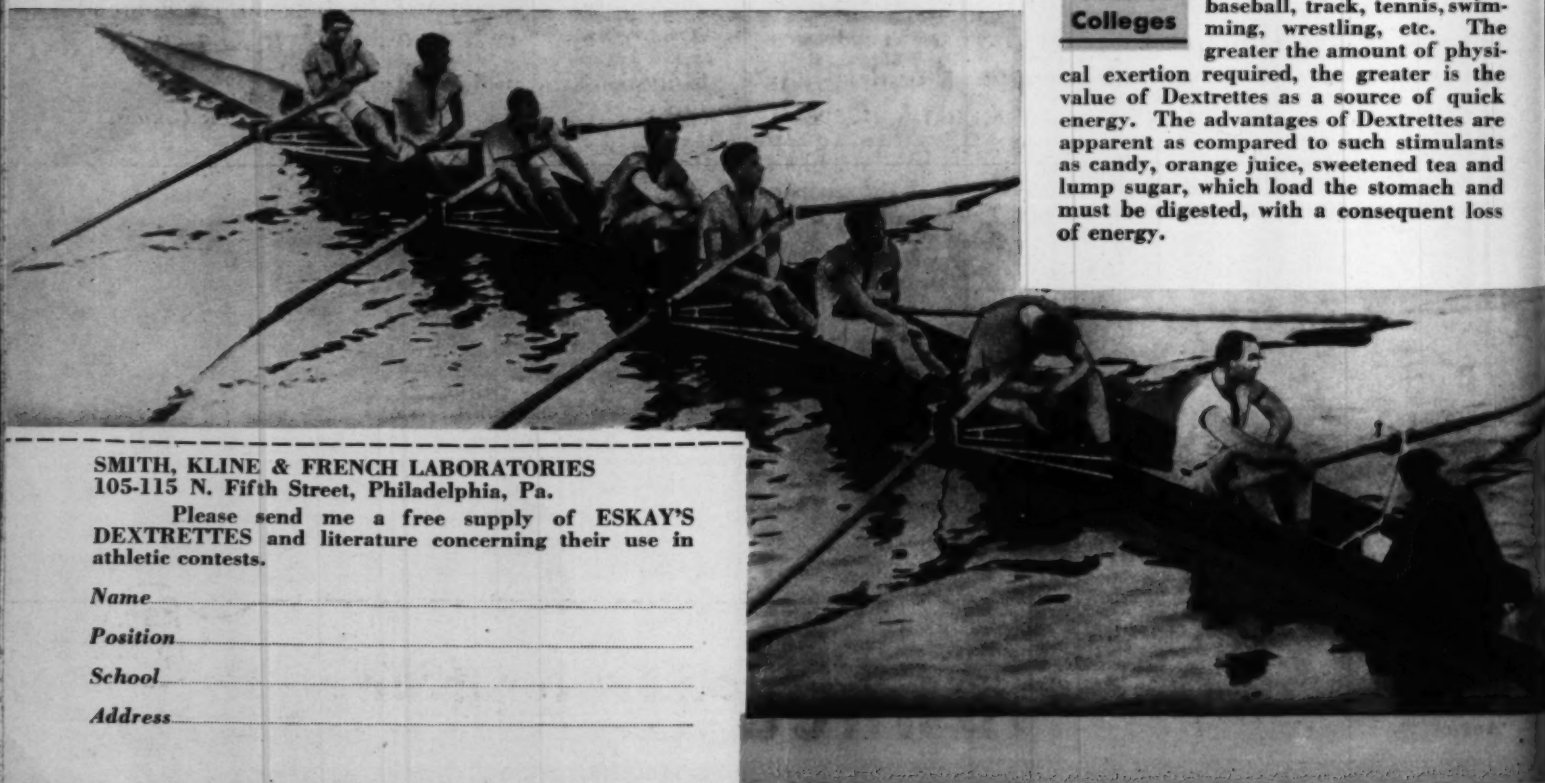
Please send me a free supply of ESKAY'S DEXTRETTES and literature concerning their use in athletic contests.

Name _____

Position _____

School _____

Address _____



Basketball Rules

[Continued from page 14]

ter. Near the end of a game coaches have been inclined to take advantage of the old rule by repeatedly sending in substitutes in order that time would be taken out between the making of a basket or the ball going out-of-bounds and the time when the ball would be put in play after the substitution. While this was considered smart coaching it caused considerable confusion at a critical time in the game.

Apparently there has been a recent wave of problems growing out of the attempt of a coach to direct his players from the sideline or to influence the official in his decisions through appeals to the official either directly or through the fans who usually take their cue from the coach. It may seem rather severe to make it illegal for a coach to even address a player or the official but it is evident that the coaching rule would never be enforced unless it were made drastic. No one is able to prove that a coach is actually giving information to his players but it should not be difficult to show that a coach is talking to his players as they go past the bench.

With respect to the attempt to influence the official's decisions it is doubtful whether any good ever comes from the objections of a coach to an official during a game and it is certain that it does cause considerable unpleasantness and often causes spectators or players to turn against an official and thus make his work more difficult.

The comments urging a coach to refrain from coaching his players to intentionally draw fouls should have a salutary effect.

McGugin to Quit Coaching

Daniel Earl McGugin, who came to Vanderbilt as head football coach in 1904, will retire from active duty at the close of the 1934 campaign, completing his thirty-first successive season as head coach.

McGugin will remain as athletic director, it was announced by the Athletic Association, having general supervision over all athletic activities of the students, including development of intramural sports.

In his formal resignation Coach McGugin said that he was reluctant to take his department from the team. "Football coaching is hard work," he asserted, "and it draws pretty heavily on the physique, especially the nerves. Thirty-odd years seem enough, and I think some other man is entitled to a chance."

Phillip Rounsevelle Dies

Phillip Rounsevelle, well known archery writer, lecturer, teacher and manufacturer of equipment, died on August 31, 1934, as the result of injuries received in an automobile accident at Cortland, N. Y., on August 24.



**IT'S SPEED
AGAINST SPEED
IN THE OPEN FIELD**

Once the ball carrier's clear of the line, or when the secondary must race a fleet end down under a forward, it's speed, and speed alone that counts!

And what cramps speed? In nine out of ten cases, just carrying too much weight, or being hampered by hard, stiff footwear.

Although 17 percent stronger, weight for weight, than any other leather used in shoes, Kangaroo is feather light. And on the feet, ounces affect the speed like pounds would elsewhere in the equipment. Kangaroo is soft and pliable too. It leaves the feet free and comfortable for subtle feints, brings the player off the field as foothappy as when he ran on.

Write "genuine Kangaroo" into your specifications for shoes—baseball, track, football or hockey shoes. Your varsities need Kangaroo for victory—your other teams should have it for the foot health and safety it brings.



**Australian KANGAROO
Tanned in AMERICA**

From Coaching School Notebooks

[Continued from page 16]

herewith. The presentation will include a practice outline of the integral parts of the system and they will be the steps in the evolution of the system.

Basic rules of the system

The system will involve the continuity of three men with the possibility of one of the three men being replaced at any time by either of the two men not included in the continuity. The bases of the system can be covered in two rules. The passer always cuts toward the basket in front of his receiver. If there is no return pass, the passer replaces his receiver when the receiver passes to a third teammate. Relative positions are assigned in the diagrams. They may be somewhat exaggerated, at certain spots, in order to facilitate teaching. The continuities may be over emphasized at first with the understanding that they are the sparrings for openings. The scoring possibilities come with breaks in the continuities via return passes. Again we note the reversion to earlier steps in the evolution of offense. A second return pass presents the over and around offense. The first return pass presents the two man combination. A pass to a man under the basket presents an earlier development. A man freed under the basket with ball makes the individual stand out. The system has been evolved and then reversed to the start. The system recapitulates the previously evolved steps of offense.

Offensive System—Three men carry the action, with two men having comparative rest. Of course there is an interchange of men at work and at rest. The modus operandi is an interchange of triangles, on either side, near end and mid lines, and the diagonals. There are six possible triangles, each utilizing three and allowing two men to rest. The continuities are first established as such and involve the use of man ahead of ball. The scoring opportunities come with breaks in the continuity by the receiver returning the pass to the passer cutting for the basket. This return pass can be used on the side line triangles with the passer cutting toward the basket for a two man triangle or pass with return pass.

The side line triangle will probably be the most efficacious. The path of the men is represented by continuous lines. The path of the ball is represented by dots. The encircled number represents the man who has the ball. The passer prepares to take the place of his receiver, when the receiver becomes a passer. This continues the continuity. The continuities only are illustrated. They give the men in action and at rest in the three triangles. The last

square in each series is intended to convey the optical reaction to the continuity.

Development—The floor may be divided into four quadrants by an imaginary line from basket to basket, which bisects the new mid line cross court. Three men and a ball may be placed in each quadrant in an arrangement simulating the first series of diagrams. This will allow for the practice of continuity in the side triangles. The passer cuts for the basket. He next replaces his receiver when the latter passes to a third man and cuts for the basket. The positions assumed correspond to the numbers and are only relative in order to clarify the action. The groups may interchange sides to accustom them to the action of each side.

The floor may be divided another way to give four divisions by a continuation of the foul lines toward both side lines. This will give a division to practice inside and outside triangles as shown in the second series of diagrams. Three men can learn a continuity in each division and then trade divisions to practically repeat what they have practiced. To reiterate, the passer cuts for the basket and if he does not get a return pass he replaces his receiver when the latter passes to a third man.

The diagonal triangles are least used and cut down the number of men practicing simultaneously. The same rule applies, viz.: the passer cuts for the basket and later replaces his receiver in case continuities are continued. Again, the places assumed are only relative but at this stage the passer always cuts for the basket.

Passer replaces the receiver

After the continuities are established five men may be placed in each half of the court for offensive practice. Proceed slowly at first and allow the passer to pass to any teammate and cut for the basket. The passer will be replaced, as he cuts, by the teammate who gave him the ball. Expressed another way, the passer replaces his receiver in any continuity. The team continuity it now established. The scoring possibilities must come with breaks in the continuity through return passes. These breaks can be arranged in a practice outline which recapitulate the steps in the evolution of our offense.

Practice Outline—One man takes his place beneath the basket. A second man, to observe the offensive fundamental of spreading, takes his place toward the side of the floor. The third position corresponds to No. 1, in the first series of diagrams on page 16. This simulates the side triangle. A number of men may be lined up in this position termed the back position. As the back man passes to the man beneath the basket he follows the rule of "passer cuts for the basket." This gives two men under the basket and the side man replaces the passer. This is the only

variation in the program of the "passer replaces his receiver." The man under the basket can shoot, or return the pass to his oncoming passer. The man who recovers the ball and passes to the back position follows the rule and stays beneath the basket for the next lineup. The second man beneath the basket "spreads" and goes toward the side line. Thus we practice assuming positions as well as going through the offensive parts.

- I. Long pass to man under basket and cut towards the basket.
 - a. Man under basket shoots.
 - b. Man under basket returns pass for passer cutter to shoot.

The next practice point is for the man in the back position to pass to the side man and cut for the basket. In this case the man from beneath the basket follows the rule and replaces the passer. The side man can return the pass to the passer cutter or he can retain the ball. A return pass calls for a follow through and simulates the over and around offense. On a return pass the receiver can shoot with or without a dribble. He can return to the side man following through. He can fake a return and dribble. If the side man retains the ball he can shoot from his position or dribble in and shoot.

- II. Back position to side position and cut to basket.
 - A. Return and follow over and around.
 1. Shoot.
 2. Pivot and return.
 3. Fake 2 and dribble in.
 - B. Retained ball by side man.
 1. Shoot.
 2. Dribble in and shoot.

In either case two men are under the basket after the shot. One throws the ball to the back position and goes beneath the basket. The second man must spread and go toward the side line.

The next practice grouping could be done in the first place. It simulates the inside triangle with two side men and a man beneath the basket. The ball is with the group at one side position, one man at the opposite side position, and the man beneath the basket. The passer passes to the opposite side man, cuts for the basket and is replaced by the man beneath the basket. The opposite front man returns the pass and cuts for the basket. The new receiver can shoot or return the pass.

- III. Side position to side position and cut for basket. Passer is replaced by man from beneath the basket.

- A. Return.
 1. Shoot.
 2. Return.
 3. Fake 2 and shoot.
- B. Retain.
 1. Shoot.
 2. Dribble in and shoot.

After the shot, one man recovers the ball, passes to side group and takes position under the basket. The second man from beneath the basket takes the opposite side position. The setup is not reestablished to continue the practice.

The last grouping to be discussed simulates the back triangle. (The diagonal triangle will be left to the imagination of the coach who wants to develop same.) The group is at one back position with the ball. A man is located at the opposite back position. The third man may be under the basket or more shallow at the pivot position. The pass is made and the passer cuts toward the basket with the option used here of cutting shallow to the pivot position. The passer is replaced by the third man from beneath the basket or from the pivot position.

IV. Back position to opposite back position and cuts shallow or deep. On the return pass the passer follows through similar to the over and around offense.

1. New receiver dribbles in and shoots.
2. New receiver returns ball for pivot play.
3. Fakes 2, retains ball and dribbles into opposite side from his passer.

The two men going into the basket is similar to other practice grouping. The man who throws ball back to the group can go beneath the basket or to the pivot position. The second man must go to the opposite back position. Energy may be saved in this last grouping by having a fourth man in the opposite front position. This fourth man may replace the opposite back men on a return pass to the back passer cutting. This will allow the original opposite back position man to take up the opposite front position after the throw out to the back position group.

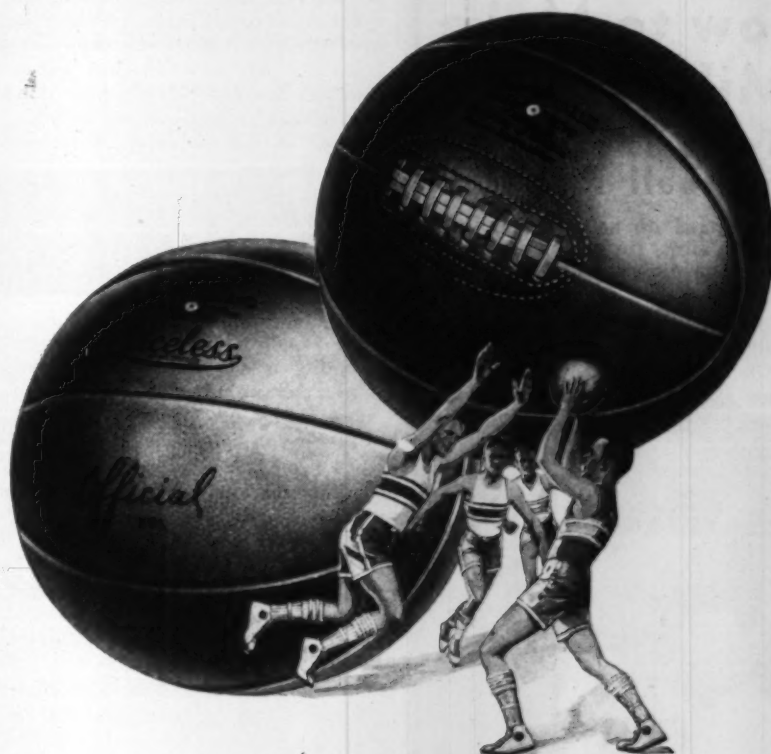
The foregoing system and practice outline are not given as much in detail as they should be. Something is left to the imagination of the user. It is hoped that the seeds of better combinations may be contained therein. It must be realized that a coach must carry beyond just knowing his work. He must be able to do it, so as to enhance his knowledge. He must be able to teach it in order to justify his job. And he must be able to apply his knowledge. When he has been able to transplant his knowledge to his boys, when they can do his stuff, teach it to teammates and apply it to the opposition, then the coach is entitled to 100% of his salary.—H. C. CARLSON

Basketball at Northeastern

RAIG Ruby, the Illinois coach, gave the basketball course at the Northeastern Coaching School held at Northeastern University in Boston. Among the valuable features of his course were the "coaching points" he gave. I managed to transcribe many of these coaching points to my notebook, and am presenting them here as I took them down:

Fundamentals

1. Feel of the ball. This point was emphasized greatly. The vital importance of



GoldSmith

Official Basketballs

No. X9L Laceless . . . No. X9D Double Laced

are recognized as being unequalled. The perfect shape—the perfect balance—the tested, double multiply lining—the patented, improved, feather-weight "Para-Valve" spell BASKETBALL PERFECTION.

Their durability and stamina assure long and continuous service.

Easy Replacement

Goldsmith "Para-Valve" bladders can be easily removed and replaced, through the lace opening. They are cemented directly to the ball and at all times present a smooth, even, non-bulging surface.

THE P. GoldSmith SONS, Inc.

Athletic Goods Manufacturers
CINCINNITI, OHIO, U. S. A.

NEW!

Send for Your Copy of the

NARRAGANSETT

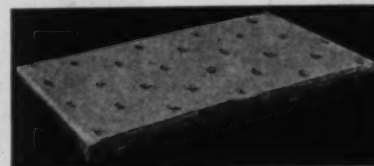
BASKETBALL BACKSTOPS AND GAME
EQUIPMENT CATALOG

Shows various backstops . . .
Instructions for painting court lines
. . . Locker room information

GYMNASIUM APPARATUS AND MATS
STEEL LOCKERS

NARRAGANSETT MACHINE COMPANY
100 Vale Street Pawtucket, R. I.

MATS . . . for WRESTLING · BOXING · TUMBLING



Manufacturers of fine mats since 1911
Send for booklet, Dept. "C"

PETERSEN & COMPANY
4225 North 16th St., Philadelphia, Pa.

How to Make Milk Digest Twice as Fast for Football Players

- They need its nourishment, but its tough curds lie on the stomach, make them groggy, and interfere with studies.
- Now this is all overcome in a simple, easy way.



Send for Talk on Diets for Football Players, and Training Table Routine now being used at leading universities.

TOO many players, coaches find, EAT before the healthy fatigue from exercise has passed away.

Milk drinkers especially feel the bad effects. After practice they go home hungry—dog-tired. They drink a lot of milk, and because they are tired they can't digest it well. It lies on the stomach like lead for hours, makes them sleepy. Too groggy to study. Grades suffer. Some men flunk and are "canned" from the team.

How Milk Is Junketized

Now coaches have learned a way to make milk digest twice as fast, and yet supply all its nourishment. This is done by junketizing milk—by dissolving $\frac{1}{2}$ a Junket Tablet in a glass of cold milk. It takes only 15 seconds. The Junket Tablet causes a soft easily digested curd to form—which digests easily whether the body is tired or not.

Milk is all important in your athletes' diets. See that they get it this way.

Mail the coupon today for a practical talk on Diet from a coach to his team. Extra copies free if you want them for your squad.

MAIL TODAY For Training Table Routine FREE

THE JUNKET FOLKS
Dept. 5310, Little Falls, N.Y.

Name of coach or trainer
School
City State



getting your players to know the action of the ball under various conditions and rotations. Special emphasis was placed on the "Blind-fold Dribble." Each member of a varsity squad should have a chance to practice this each day. It pays dividends.

2. Passing. Emphasis on teaching.
 - a. Get a fixed point of reception of passes.
 - b. Pass from point of reception of pass.
 - c. Best type of passes against:
 - (1) Man-to-man defense is the under-hand pass.
 - (2) Zone defense is the push pass.
3. Shooting. The one thing governing shooting is the ability of the player to center all attention on the basket. The more ability players have to control this centering of attention the better shots they are. The more confidence a player has the more attention is on the basket. Several suggestions as to method of building up confidence in shooter:
 - (1) Fix eyes on near rim of basket.
 - (2) Shoot over moving hand if it bothers you.
 - (3) Let nothing enter player's mind except scoring.
 - (4) Medium arch best but it will vary with individual player, with natural rotation to the ball.
 - (5) Head position should not be changed when decision is made to shoot.
 - (6) If you wish to change the arch of player's shot raise or lower back or crouch.

4. Free Throwing. Determines the outcome of more games today than any other one phase of the game.

- a. Allow practice only during scrimmage.
- b. Allow players to use the shot on the foul line that they use from the floor. This saves time in that you do not have to develop a specialized shot. However if a player is not accurate with his floor shot it might be advisable to try some other form.

5. Pivots. The most important thing of any pivot is to get the ball into the hands at the right time. If this is not done a player is limited to a great extent on what he may do. Officials should particularly check on the timing of the arrival of ball in player's hands before calling the traveling rule.

6. Starts. A greatly neglected point in coaching of a good many high school teams.

- a. Feet should toe slightly out.
- b. Weight should be kept low.
- c. Have desire to get away quickly.
- d. Stretch yourself.

More starting should be done by players without the ball than those with the ball. Basketball should be played in straight and zig-zag lines and never in arcs.

7. Speed. One of the determining factors of great players in the game today.

- a. Jogging speed used for resting.
- b. Pace for average playing.
- c. Burst speed for emergency or when time to cash-in comes.

Offensive Team Play

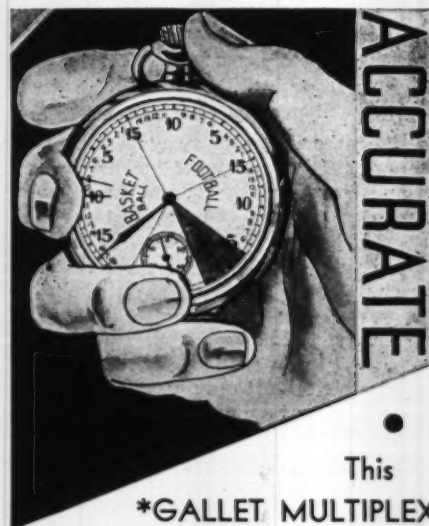
1. The secret of offensive team play is to get players really playing together. They should know what the other fellow is thinking and going to do. This playing



This Mark Represents More Than a Name

On the baseball diamond, on the gridiron, on the hockey rink, on the basketball court, and wherever athletics are indulged in, there you will find equipment bearing this trademark. It shows that the product was made by Draper-Maynard, but it also has a broader significance. It is a symbol of highest quality, of years of craftsmanship, of a pride in producing superior athletic equipment. You can't go wrong when you specify D & M.

The
Draper-Maynard Co.
Plymouth, N. H.



This *GALLET MULTIPLEX will give you LASTINGLY DEPENDABLE SERVICE...

When accuracy is important—don't buy anything short of the best... A Gallet Multiplex guarantees satisfactory service that lasts! It is sound economy to buy a Timer that serves longest...

***FOR FOOTBALL BASKETBALL HOCKEY**

OTHERS FOR ALL SPORTS USES

JULES RACINE & COMPANY
20 West 47th St., N.Y.C.
Send me Sport Timer Catalog S.C.

Name.....
Address.....

together is what makes the great teams today.

2. The zone defense leaves men in the best offensive positions for the fast break.

3. If you want to know a defense to stop a team's offense study that team's defense. Never let second team play the same defense as the varsity.

4. The fast break offense is the only type of offense that will go the same against any defense.

Defensive Team Play

1. Against a fast break offense if a team uses a pick-up defense it will change the fast break into a slow break. This in a great many instances will greatly depreciate the efficiency of the team.

2. Small players should be placed against big players, the main idea being that the big players will be fouled out of the game.

3. In the assigning of men in a man-to-man defense put like players against some one of his own make up. Never put a player of retiring personality against one with a dominating personality.

Offensive Plays

1. All offensive systems can be boiled down to about five basic or fundamental plays.

2. Do not burden your team with a lot of plays.

3. Only one or two out-of-bounds plays in offensive end of court are necessary.

4. It's the *timing* of plays that makes them go and not the particular play itself. Spend a lot of time on this phase of your team's offense.

5. If you have a veteran team and they are needing something to strive for in practise, a possible change of system or plays may help to keep them on edge.

FRANK M. SIMMONS
Newton High School
Newtonville, Mass.

Snavelly at Carolina

WITH coaches from all sections of the Eastern seaboard in attendance, the annual University of North Carolina Coaching School was held from Aug. 30 to Sept. 1 at Chapel Hill under the direction of Carolina's new football coach, Carl Snavelly, formerly of Bucknell. The first week of the session was given over to football, training and conditioning, boxing and wrestling; the second week to basketball, baseball and track. Only the football course will be reported here, in outline.

GENERAL OFFENSE: Versatility is the key to success.

Types of formation and their features:

- (1) Close formation: quarterback handling ball, or in position to handle it. Line plays or cross bucks.
- (2) Open formation: direct passes to back-field men, flank plays, reverse plays and forward passes.

MODERN FOOTBALL FUNDAMENTALS

...A new 16-millimeter motion picture prepared in coöperation with, and directed by...

HARRY G. KIPKE

Head Coach, University of Michigan

DEMONSTRATING, in Can be shown with any motion, fundamental drills 16-millimeter projector. representing the most Purchase price including modern coaching practice, transportation, \$48.00. this picture is being ac- Not offered on a rental claimed as an invaluable basis. To insure prompt aid to football coaches. delivery, make it a point to 2 reels 16-mm. safety film. wire your order today.

EASTMAN KODAK COMPANY

Teaching Films Division ROCHESTER, N. Y.

"Lou Little's Football"

New book by Lou Little & Arthur Sampson
\$2, Postpaid. Immediate Delivery

"Practical Football"

By Fritz Crisler & Tad Wieman
New, Illustrated. \$3, Postpaid

"Intercollegiate Football, 1869-1934"

A unique book. Complete records
Hundreds of pictures. \$7.50, Postpaid

For These Books or Any Others
SCHOLASTIC COACH BOOKSHOP
155 E. 44th St., New York, N. Y.

Antiphlogistine

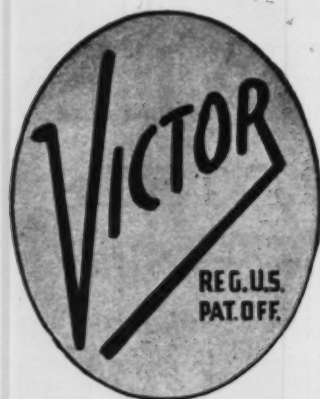
TRADE MARK

PRE-EMINENT AS A REMEDY FOR
ALL INFLAMMATIONS AND CON-
GESTIONS OCCURRING AS A RE-
SULT OF ATHLETIC INJURIES

Sample will be sent upon request.

The Denver Chemical Mfg. Co., New York, N. Y.

Make and Show Your Own S-L-O-W MOTION PICTURES



*Silent and
SOUND-ON-FILM
Equipment*

**Easy Operation
"Sure-Fire" Results
POPULAR
PRICES**



Ultra Speed of 72 frames per second, for making S-L-O-W Motion Movies, is a standard feature of both the Popular-Priced Model 3 and All-Feature Model 5 Victor 16 MM. Cameras.

Victor Cameras are superb instruments . . . light, compact, and easy-to-use . . . that permit the making of Professional-Quality Movies at the touch of a button. VICTORS are sensibly priced at from \$72.50 up . . . yet have no equals in their respective price ranges. Inquiries addressed to Davenport will bring complete information and illustrated literature . . . WITHOUT OBLIGATION. Write today!

VICTOR ANIMATOGRAPH CORP.
Dept. of School Sales, DAVENPORT, IOWA
Branches: 188 W. Randolph St., Chicago, Ill.
242 W. 55th Street, New York City, N. Y.
650 So. Grand, Los Angeles, Calif.

WORLD'S FINEST 16mm MOTION PICTURE EQUIPMENT

SO...you're off to NEW YORK?

YOU'LL find the old town happier . . .
business is better . . . people are gayer.

You'll be looking for a hotel that's convenient, comfortable, friendly and easy on your pocketbook.

Come to the Piccadilly, one of New York's newest hotels. Rooms are sound-proofed, with plenty of light and air and sleep-inducing beds.

Tasty meals in the Georgian Restaurant . . . SILVER LINING Cocktail Room . . . serving the best at moderate prices.

SINGLE ROOM	\$2.50 up	PRIVATE BATH
----------------	---------------------	-----------------

Hotel PICCADILLY

227 West 45th Street New York
W. STILES KOONES, General Manager

- (3) Spread formation: to kill time; to open up defense; fine for forward passing and trick plays.
- (4) Kick formation and modified kick formation: strong for end runs and forward passes. The modified kick formation is a splendid type of offense and is used exclusively by many teams, particularly high school and prep school teams.

Planning a play:

All plays, including fakes, must have strength in themselves.

A play to be good must fit into the sequence of plays; that is, plays must start alike.

GENERAL PRINCIPLES OF DEFENSE TO MEET OPEN FORMATION:

Drop center out of line.

Drop right end back; sometimes both ends.

Move backs deeper.

Be sure guards and tackles understand their responsibility for sneak plays, and rushing the passer.

Forward pass defense:

Put pressure on the passer; rush him.

Cover all eligible receivers (zone, man-for-man, or combination types of defense).

Coach linemen to assist as much as possible by checking and interfering with eligible receivers in a legitimate way.

GENERAL:

Ends often give away pass plays. Teach ends to be good actors.

Insist that men relax physically, but not mentally, between plays. Have them be especially watchful and wide-awake after a time-out period and after a substitution has been made by opponents.

Shift promptly and quickly on defense to meet the offensive shift.

Most missed tackles are due to the fact that the tackler did not drive far enough. Drive on and through and hit far leg of runner at an angle and across body if possible. Steal ball if possible; it is legal.

When offensive runner is coming behind interference hit the interference and break it up, rather than attempt to circumvent it to get to ball-carrier.

Defensive halfbacks should keep eyes peeled on outside back on his side; should study his playing habits and capitalize on them. Halfbacks must turn everything in on diamond defense. On short, high kicks call for fair catch and yell "my ball." Give halfbacks definite men to cover on passes, and cover deeper man when it is necessary to cover two.

Type of forward pass defense.

Snively believes the diamond defense with a roving center and a six-man line to be the most satisfactory if the line is strong and the backer-up is good at backing-up work. If he is not, leave him in the line. During the season use only one style of defense; do not change it in mid-stream, change only individual assignments. Don't have ends too wide. On box defense ends have to turn play in. Halfbacks line up about 10 yards back and a little outside ends.

End play

An end must be a good blocker, tackler, a quick starter, a reliable pass-receiver. There are three types of ends: (1) smashing end who goes through and gets the ball-carrier; (2) the waiting type of end who diagnoses the play and gets the ball-carrier; (3) the angling end who goes in one or two steps at an angle, poised, balanced, both hands out, head up, ready to go to either side. Carolina ends are of the third type. They get across the line of scrimmage and then follow the ball.

On passes they drop back and cover territory. With third down and one yard to go they smash. They try to keep play inside and retreat only to cover passes. They never should let the offensive man shift outside them. Against double wing-back offense do not let ends go too deep. Tackles hit ends hard on short side; ends and tackles go in together. The guards should not go in too far. Coordinate the line charge. On inside play end drives in against the tackle; on outside play end drives in fast, driving play back, and gets the ball-carrier.

Line play

All Carolina linemen are to charge low and hard, making contact with shoulder, and at the moment of contact whipping the elbow into the solar-plexus of the opponent, with arm held so that back of fist is toward own chest. This whipping-up of the elbows is becoming quite common practice. It serves to knock the wind out of the opponent, and makes the subsequent work of the charge more effective. Some teams have their linemen whip up both elbows.

JOHN J. VAN NOPPEN
Mohonk School
Lake Mohonk, N. Y.

Northwestern

THE eighth annual Northwestern University Coaching School was held during the usual period, the last two weeks in August, under the efficient direction of K. L. Wilson. There were about 200 coaches in attendance. They came from 34 states, the District of Columbia and three provinces in Canada. Much favorable comment was heard on the arrangements for the comfort and convenience of the coaches. The field arrangements were especially good, with bleachers surrounding the demonstration section of the field so that the coaches could take seats during the demonstrations, and the loudspeaker system in operation.

In the football course, the three coaches, Dick Hanley, Lou Little and Fritz Crisler, worked successfully to achieve a close coordination between their lectures and the field demonstrations. Everything that perplexes the beginning coach, and even the more experienced one, was handled in detail, fundamentals of offense and defense, choosing the men for the positions, arranging the daily work to fit the team's development, offensive and defensive tactics, morale, equipment and treatment of injuries.

In order to cover this extensive program about 50 mimeographed sheets were given to the members of the course, in daily allotments. These mimeographed sheets left each member of the course with a fine permanent record or book of the offense covered by each of the three coaches. They also embodied many things connected with equipment, treatment of injuries, daily practice arrangement, etc.

The morning sessions began at 7:45 and at 11 o'clock field or demonstration work was taken up, which lasted until noon. Each of the three coaches, Hanley, Little and Crisler, lectured in turn and by use of the blackboard on the platform and Northwestern squad members in uniform on the field, put over his own ideas of football in fine style. One thing that pleased the members of the course was the willingness and eagerness of the coaches to answer questions.

One of the features in the field demonstration was the use of different members of the players for the All Star game at the Fair, who were working out each morning



FAMOUS COACHES

employ an
all-powerful aid—

FILMO S-L-O-W MOTION MOVIES

Filming the Ohio State
football squad for training
purposes

• One of the most unique and valuable athletic training aids is the s-l-o-w motion picture. Right now Northwestern, Ohio State, Princeton, Kansas, Nebraska, Iowa, Franklin & Marshall, Southern California, Bucknell, and scores of other universities and colleges are successfully employing Filmo's revealing accuracy, and lightning-quick eye to show football players what's wrong, where improvement is needed, how a more powerful attack and defense can be attained.

The Filmo 70-D 16 mm. motion picture camera exactly fits the coach's needs. Seven film speeds permit taking movies in normal or s-l-o-w motion speeds, or in useful intermediate speeds. Its turret head mounts three lenses for catching action at various distances and under all light conditions. Filmo 70-D is easy to use—anyone can quickly learn to take excellent athlete training pictures with it. 16 mm. film is inexpensive, and the first cost includes developing and return to you, a few days later, ready to project.

There are cheaper cameras than Filmo, but none to equal it. You need good pictures, and it takes a good camera to make them. Filmo is designed and built by the craftsmen who for more than a quarter-century have made the professional studio cameras used in the major film studios of the world.

Bell & Howell's standards of quality make Filmo a camera which produces movies of surpassing brilliance, clarity, and steadiness—the kind of movies the coach must have.

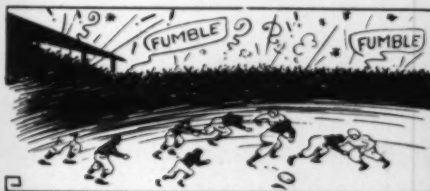
The Filmo Projector, giving your pictures the generous size and brilliance of theater-projection, complements the Filmo Camera in every respect—design, precision, performance, long life. Exceedingly simple to operate, it may be stopped on any scene for prolonged discussion, retarded in speed for closer scrutiny of the action. It is highly portable, and may be carried about from class room to auditorium, to dressing room.

Remember, to be of practicable use in athletics, your movies must be of high quality. And to secure this quality, you need Filmo precision and dependability.

MAIL THIS TODAY

BELL & HOWELL COMPANY, 1812 Larchmont Ave.,
Chicago, Ill.
Gentlemen: Please send complete information on
Filmo Motion Picture Equipment for Coaching.

Name.....
Address.....
City.....
State.....
School.....
Position.....



Passing Zip—Fewer Fumbles

That's Colo . . . You need it!

Better Each Year

At dealers or send 50c for tube
Six tubes, 40c each

The Colo Mfg. Co.

Oak Harbor, O.

Knight Quality Archery Tackle

Built Especially For School Use

ROME SPECIALTY CO., INC.
Rome, N. Y.

WRITE FOR CATALOGUE AND SCHOOL PRICES

CROSS-COUNTRY BOOK Track Athletics and Cross-country

By Lloyd W. Olds

Written expressly for the high school coach—
\$2, postpaid.

SCHOLASTIC COACH BOOKSHOP
155 E. 44th St., New York, N. Y.

on the practice field, to demonstrate their ideas of the technique of offensive blocks and defensive charging. Bernard of Michigan, Vuchnich of Ohio, and Gorman of Notre Dame, gave fine expositions of centre play. Sauer of Nebraska, Mikulak of Oregon State, handled the fullback's position; Gilman of Ohio and Skladany of Pittsburgh, illustrated the fundamentals of end play; Walton of Pittsburgh, explained a guard's duties, Krause of Notre Dame, Schwammel of Oregon State, Rosequist of Ohio and Crawford of Duke, demonstrated tackle play. Everhardus of Michigan, Laws of Iowa, Sebastian of Pittsburgh and Manske of Northwestern were others who gave their ideas of how the different positions should be played.

Another feature of the course was the demonstration of the possibilities of the kicking game by LeRoy Mills. Apparently he is the first to consider that part of the game as an exact science. Those who had not seen Mr. Mills before were absolutely amazed at what this man, who is not a youngster by any means, could do with a football and his right foot. It opened up a new field of possibilities as to what could be done in placing kicks out of bounds, controlling the spiral and bounce, the multiple kick, place and drop kick.

Dick Hanley, a master of the reverse and fake reverse from the double wing-back formation gave many plays of that type. Lou Little gave the details of his spin attack from the single wing-back and the characteristics of his system, such as the low-playing defensive line which does not use the hands but drives into the offense with body, shoulders and head. Fritz Crisler lectured on special features of offensive line play—the lateral-opening charge, the straight-ahead charge, and the principles of lead blocking for the lateral opening.

Crisler was also one of the basketball instructors. He coaches both football and basketball at Princeton. The Western coaches were particularly interested in hearing about Eastern basketball style, which, in the colleges of the Eastern Inter-collegiate League must be a game of con-

siderably more personal contact and hard-riding guarding than is allowed in the West. Princeton and most Eastern college teams use the man-for-man, individual-responsibility defense with the usual switching, and the fast-break attack.

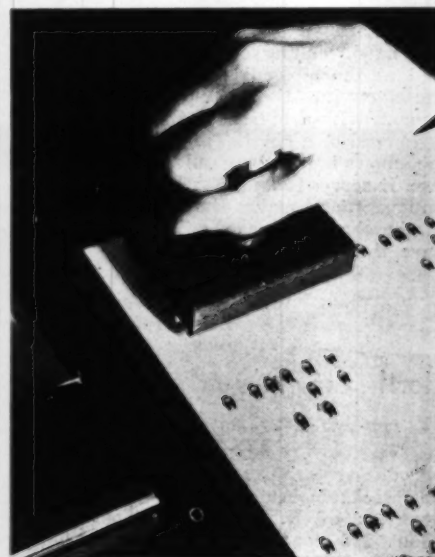
In basketball we also heard from A. C. "Dutch" Lonborg, one of the most successful young coaches in the country. Lonborg has been extremely successful with his type of offense, which stresses an attack built around a large, clever pivot man, who can make a one-hand shot or a two-hand jump shot.

Descriptions of Lonborg's methods of penetrating the zone defense and the man-for-man defense were given. In penetrating the zone one method is to have the guards handle the ball extremely fast in an effort to draw the defense out of position. Two or three offensive men within the defense can then cut sharply to an opening to receive a hard pass. The center pivot, if he is a tall, rugged, alert player, can be used as the chief threat. Against a zone defense the center pivot plan ought to work fairly well if the pivot player is permitted to operate to either side of the free-throw lane, as well as within the lane. After receiving the ball it is optional with him, depending on the position of the defense, whether he pivots and shoots or dribbles for the basket, or passes laterally, inside or outside, to the forwards or guards.

Lonborg gave the details of many screen plays for meeting the man-for-man switching defense. Guards criss-crossing with a pass inside to a forward breaking out, with the guard on the opposite side of the floor or the center screening for the forward is a sound basic play which is as good as anything for causing confusion in the defensive switching. Innumerable variations of this play are used everywhere against the man-for-man defense. Good ball handlers can usually keep control of the ball long enough for a fairly decent shot against the usual run of defenses.

A. R. EDWARDS
Concordia High School
Concordia, Kansas

Whatever Formation You Desire with this stamp



With the Scholastic Coach Football Formation Stamp you can set up any formation imaginable in a minute's time. Have your manager stamp out the desired formation by the hundreds for distribution among your players, who then can mark out all your plays for future reference. Change the formation whenever you please merely by shifting the little rubber football types to different positions.

THE PRICE IS ONE DOLLAR, COMPLETE

For the price of one dollar you get
12 Movable Rubber Football Types
A Stamp with Five Grooves
An Ink Pad
A Pair of Tweezers

All packed in a sturdy box and sent to you immediately, postpaid.

Improve Your Game *with* . . . **DUBOW** **FOOT BALLS**



D 45

Dubow's Foot Ball D45, shown at the left, is approved by the National Federation of State High School Athletic Association. The D45 conforms in size, weight and shape to the NEW specifications as decided upon by the Football Rules Committee. Made of the finest selected pebbled grain cowhide specially tanned for this purpose. Double lining of the highest grade fabric. Each ball is inspected at the factory by a representative of the National Federation.

Besides the D45 there are many other Dubow models. The prices are easily within the reach of your most economical budget. Ask your dealer to tell you more about these fine foot balls, or write for our catalog direct to

J. A. Dubow Manufacturing Co.
1907-13 MILWAUKEE AVE., DEPT. D-10, CHICAGO, ILL.

Use this coupon or order by letter

SCHOLASTIC COACH BOOKSHOP
155 East 44th Street
New York, N. Y.

Sirs:

Enclosed find one dollar for which send me at once your Football Formation Stamp, complete as described. I understand that I may return it and receive my money back if I am not satisfied with it.

Name.....

Address.....

City.....

State.....

FOR YOUR BULLETIN BOARD



Keystone

ABOVE, LEFT—ANDY KERR, THE COACH AT COLGATE, GOES UP FOR A BETTER VIEW OF HIS TEAM IN PRACTISE: Right—NO COOP FOR POP WARNER, WHOSE PREFERENCE IS FOR THE AMBULATORY HORSE. The Old Master startled his Temple University squad at practise recently by arriving on horseback.



Wide World



International

OR, A HANDSHAKE AND A GRACIOUS BOW FROM THE JAPANESE: Glenn Cunningham, captain of the American track team that visited Japan last month, participating in the opening ceremonies at the Jeiji Shrine in Tokyo.

RIGHT — LAWSON LITTLE OF CALIFORNIA EQUALS A RECORD FORMERLY SHARED BETWEEN BOBBY JONES AND HAROLD HILTON OF ENGLAND: Winning the U. S. amateur championship last month, Little became the holder of the two great amateur titles in one year—British and U. S. Only Bobby Jones has ever won all four major titles in one year—British and U. S. open, British and U. S. amateur, in 1930.



Wide World

LEFT—A GREAT AMERICAN MILER RECEIVES A SCROLL OF HON-

Scholastic Coach will pay two dollars each for high school pictures for this page.

Track coach tells how to gain strength and energy...



ARCHIE HAHN, Head Track Coach and Athletic Trainer at the University of Virginia, says:

"A distance runner can't afford to get tired easily. And that explains why I am a Cocomalt fan. I know that when I mix Cocomalt with milk as directed, I am almost doubling the food-energy value of the milk. The extra food essentials supplied by Cocomalt help to build the strength and stamina every track star must have."

(Signed) Archie Hahn
University of Virginia



Cocomalt is a food, designed to be mixed with milk, producing a delicious food-drink of high nutritional value. Rich Sunshine Vitamin D content. Cocomalt is accepted by the American Medical Association, Committee on Foods. Sold at all grocery and good drug stores.

Cocomalt
Adds 70% more food-energy to milk
(Mixed according to label directions)



GENERAL OFFENSIVE PLAY OF THE LINE

By Harold C. Prudhom

Mr. Prudhom, coach at the Altus, Oklahoma High School, uses an outline of this kind for distribution among his players, "boiling down" their system so that they can take it home and refer to it from time to time. "While nothing original is claimed," Mr. Prudhom writes, "I am submitting this outline in the hope that new coaches will find in it something of value." We believe that they will.

Principles of Offensive Line Play

1. Keep on the feet. Do not lunge but keep the feet under the body so that it will be under control at all times.
2. Keep lower than the defensive opponent.
3. Go on and get a second man after you have put your own man out of the play.

Offensive Stance

This must be the same on every play. Keep the head up, buttocks low, back straight and feet under the weight. Don't get off balance. One arm can rest on knee, the other lightly touching the ground. The knee of the back leg is about three inches from the ground.

To teach the proper stance to an inexperienced lineman, have him draw a square on the ground about two and one-half or three feet on a side. Have him place his back foot in the rear corner, the other in the middle of the opposite side, and the hand on the side of the rear foot in the front corner of that side. Face straight to the front. Don't point the play.

Charging

The charge should be forward then up. Keep the head up and body low until contact is made. Then a lift is added to the drive. Charge with the neck and back stiff and watch opponent's legs. Always keep the weight under control. Leaning linemen are of little value. If necessary use the hand on the ground to keep from being pushed down. Keep digging when contact is made. Let the legs do the work of guiding your direction.

Variety of Attack

Single Blocks

Shoulder Block—Used to open holes, and sometimes when running interference. Hit your opponent first.

Long-body Block—A waiting block, used when blocking for kicks and passes, also for filling hole of running guard.

Indian Block—A waiting block, used the same as long body block. Wait until opponent shows then dive across in front of him. This is safest when used by tackles or ends, when they will not hit teammates with feet.

Folded-arm Charge—Sometimes fold arms on chest and charge into opponent's head, using folded arms.

Cart-wheel or Pivot Block—When a man slips by you, and if play has not gone by, use the cartwheel or pivot block or clip him from behind when close to the line.

Cross-body Block—Effective for hitting opponent who has good control of himself. Run close to the opponent and throw body across his thighs, without leaving the feet, and bridging the back high. If opponent is not bowled over by the force of the impact, be sure to keep contact with him by the crab crawl.

Side Swipe—Allow opponent to charge by you on opposite side of play and as he gets even with you throw hip into him from side.

Leg or Knee Clip—A running block, used by a lineman when running interference or going through for a secondary.

Hip Block—A waiting block.

Double Blocks

Double-shoulder Block—Sometimes two linemen charge together, shoulder to shoulder into opponent's stomach and carry him back. Keep low with legs well under you. Do not spread.

High and Low Block—Sometimes use high and low block on opponent. The man away from the play charges low and dives against opponent's knees while his teammate hits him high with shoulder block and upsets him.

Squeeze Block—Sometimes allow opponent to start through line and squeeze him.

Against Standing, Charging, and Lying-Down Line

Against a standing line charge hard and fast. Get under opponent's arms. When alone use shoulder or body block, keeping body between opponent and play. When two men are working together use double shoulder or high and low block.

Against a charging lineman, when working alone, charge him only when opening a hole. At other times block him away from the play. Use a long body or hip block or side swipe him as he goes by. When two men are working together use a high and low or a squeeze block.

When an opponent lies down, fall flat on his head if play is coming near you. If not, go on through for a secondary man.

Use of Lineman for Interference

Most teams use a running guard who swings out of the line to run interference and block on certain plays. Sometimes certain linemen are sent through the line to block the secondary. One of these methods should always be used against a six man line.

In coming out, the swing back and pivot are one co-ordinated movement. A pivot is made on the foot away from the direction in which the man is going. The foot moved back is the one the drive is made from. The body is kept low. After joining the interference the lineman must use a running block. He may use the shoulder, leg clip, or the cross-body block.

On some plays, when the lineman goes through the line for a secondary, he should go through fast and know whom he is going to hit.

Play on Line Bucks and Cut-Back Plays

On line bucks over their territory, offensive linemen are expected to charge opponents out of the way to open a hole. They must charge fast and contact must be made, with opponent, low and hard and move him to one side or take him back, depending upon the type of play and their opponent.

When working alone use shoulder block, going into a hip block and keep pushing to side.

When defense is playing wide, on a quick opening play, charge fast and use body block. After contact is made raise the body high so he can not reach over you.

When two offensive men are working together use the double shoulder or high low block.

Get body between opponent and path of runner and keep pushing.

After runner has passed go on and handle a second man.

Blocking for End Runs and Slant Plays

When blocking in the line for end runs linemen should not charge defensive man unless he is waiting and cutting back of his own line, then charge across diagonally between him and the play and cut him down from the side or back.

Let him charge and wait for him, by securing position and drawing him into a hole. Meet him so as to make him go on opposite side of the path of the ball. Leave a little opening on the side you wish him to go and when he gets even with you side swipe him by throwing your hips into him, or get position and turn him behind the play with a pivot block. Go on through for a secondary.

Blocking for Passes

When blocking for passes linemen do not charge across line, but wait for opponent to show. He then throws his body across in front of him, using the long-body or Indian block.

Linemen when coming out of the line to block, if they have time to meet tackler, use a body block. If they do not have time to take position for a waiting block they use a leg clip, diving across the

front or side of the tackler's legs. Most teams use one or two line men who pull back to block for passes.

As soon as pass is made all linemen who can should run to the spot where the ball is going and cover receiver or tackle as the ball is intercepted.

Blocking for Kicks

Line does not charge. Each lineman heads in towards center with their bodies parallel to the line of scrimmage. The guards execute a long body block while the tackles use an Indian block.

The center, if opponent charges fast, drops low and uses a long body block by throwing his feet to the side his opponent is going through. If not rushed he executes a long body block with the head towards the side opponent is on.

Some teams have the left tackle use a hard shoulder block, driving his man in or if he is wide run him wide then go down the field.

All linemen should go down the field after the count of three or when they hear the ball strike the kicker's foot.

When the kicker fumbles the ball or it is blocked he calls "ball" and every man on the offense turns and tries to fall on the ball.

On punts the ends play wide and go straight down the field fast, being careful to keep wide enough so that they will not be turned in and safety go outside of them.

For place and drop kicks the ends play in close and use a body block, running the tackle outside.

General Offensive Tips for Linemen

1. When playing against a weak man whom one can handle, one man should go through and get a secondary. Against a six-man line, one man should always go through if he does not pull out for interference.

2. After you have fulfilled your assignment go through for a second man. He may be just the right man.

3. On line plays keep alert for fumbles.

4. Keep your body between opponent and play. To do this keep your eye on your opponent, then you must keep on your feet to be able to move with your opponent.

5. Always play a tight line.

6. Play low enough at all times to be under your opponent.

7. Give all you have in taking a man out.

8. After you have your man downed, go on through for a secondary player. Likewise when you have blocked for a punt or pass go down fast when you hear the foot strike the ball, or when the ball is passed.

9. At all times be careful not to betray to opponent where the play is to go, either by your eyes or pointing your body.

10. If you see an opponent slicing behind his line tell the quarterback, or if you have a weak opponent, report it.

11. After the play is stopped help the ball-carrier to his feet.

12. Line up fast.

13. Talk up the play at all times. Pat a man on the back for a good play.

14. On shoulder-to-shoulder charge, keep in contact with teammate by means of elbow; also with signals on high and low block.

15. When opening a hole keep digging with short steps and get rump outside.

16. In practice scrimmage dive on every fumble.

17. After a pass is thrown all players should charge to the spot as fast as possible. If your man catches it you may be able to run interference, and if intercepted tackle receiver.

Swimming Records Approved

Official acceptance of nine interscholastic swimming records and the same number of intercollegiate records, established during the 1933-34 season, was made last month by the National Collegiate A.A. swimming records committee, Philip S. Harburger of New York, chairman.

Leading in interscholastic performances during the season were Matthew Chrostowski of Central High School, Providence, R. I.; John Macionis of Mercersburg Academy, and above all Alfred Vande Weghe of Paterson, N. J. In seventy-five-foot pools Chrostowski cut the interscholastic figures for 100 yards free style from 0:54.2 to 0:53.4 and Macionis those for 220 yards from 2:18.2 to 2:17, for 440 yards from 5:05.6 to 4:58.4, while Vande Weghe swam 100 yards back stroke in 1:01, shattering the scholastic mark of 1:03.8, as well as the world's record of 1:01.2. Vande Weghe since has defeated Japan's foremost dorsal aces at 100 meters.

The list of accepted interscholastic records follows:

POOLS 75 FEET AND OVER

50 yards free style—0:23.8, James H. Reilly, Jr., Rutgers Prep., at New Brunswick, March 6; Matthew Chrostowski, Central H. S., Providence, at Philadelphia, March 10; James H. Reilly, Jr., Rutgers Prep., at New Brunswick, March 20.

100 yards free style—0:53.4, Matthew Chrostowski, Central H. S., Providence, at Pawtucket, R. I., March 17.

220 yards free style—2:17, John Macionis, Mercersburg Academy, at New Haven, January 20.

440 yards free style—4:58.4, John Macionis, Mercersburg Academy, at Mercersburg, Pa., February 24.

100 yards back stroke—1:01, Alfred Vande Weghe, H. S. of Paterson, N. J., at New Brunswick, N. J., March 3.

200-yard relay—1:37, Mercersburg Academy (Stump, Hartlein, Thomas, Johnson), at New Haven, Conn., January 20.

POOLS 60 TO 75 FEET

100 yards free style—0:53.6, Matthew Chrostowski, Central H. S., Providence, at Providence, February 17.

220 yards free style—2:16.6, John Macionis, Mercersburg Academy, at Woodstock, Va., January 26.

100 yards back stroke—1:02.7, Adolf Kiefer, Roosevelt H. S., Chicago, at Chicago, March 2.



NO MORE HARD, CRACKED SHOES

JUST RUB-IN 3-IN-ONE OIL

Avoid cracked and hardened sports equipment by using 3-in-One regularly. It's a money-saver! Get some now.

MEMBER N. R. A.

FEET HURT?

DON'T ALLOW ATHLETES FOOT... SKIN-SPLITS... CHAFING TO HURT YOUR

GAME! BRO-WEA relieves foot troubles quickly, cools... soothes... cleans up skin splits... soreness between toes... chafing.

Used by many leading hospitals, universities, golf clubs, major league baseball clubs and other athletic institutions.

Regular size 50c... 1 lb. training room size \$1.50... 10c size free sample on request.

BRO-WEA (BRO-WAY) INC.
180 N. Michigan Ave., Chicago, Ill.

Tree Growth OF Football History AND Progress

An attractive poster, 22" x 28", for dressing rooms, field houses, coaches' offices, trophy halls, gymnasiums, bulletin boards—depicting the progress of football from the time of the ancient Greeks right up to 1934.

One dollar, postpaid, in protective wrapper

IN TREE FORM, WITH DESCRIPTIVE BRANCHES SHOWING THE EVOLUTION OF THE GAME WITH ALL SIGNIFICANT DEVELOPMENTS.

American Football Institute

JOHN DaGROSA, President
Suite 719—Real Estate Trust Bldg.
Philadelphia, Pa.